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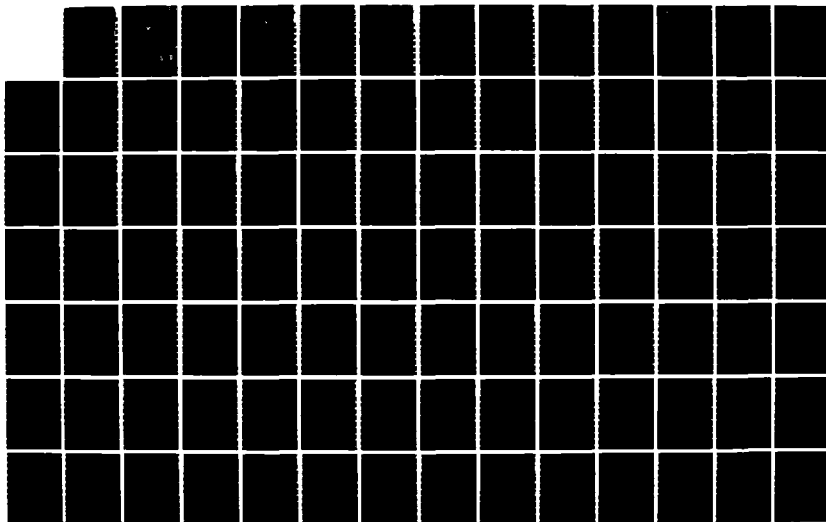
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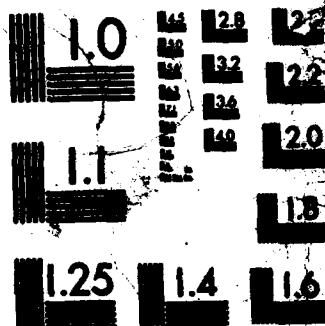
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STUDENT REPORT

A COMPARISON OF JOB ATTITUDES:
AIR TRAINING COMMAND PERSONNEL
VERSUS OTHER AIR FORCE PERSONNEL

MAJOR LINWOOD N. CHAYER

86-0525

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REPORT NUMBER 86-0525

**TITLE A COMPARISON OF JOB ATTITUDES: AIR TRAINING COMMAND
PERSONNEL VERSUS OTHER AIR FORCE PERSONNEL**

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**Submitted to the faculty in partial fulfillment of
requirements for graduation.**

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<p>The Leadership and Management Development Center (LMDC), Maxwell AFB, Alabama, uses a detailed job attitude survey, the Organizational Assessment Package (OAP), to assess the job attitudes of Air Force personnel. This study examines extensive LMDC data (collected through the OAP between 1 October 1981 and 16 September 1985) and compares the job attitudes of Air Training Command (ATC) officers, enlisted members, and civilians to "other" Air Force officers, enlisted members, and civilians. The study concludes that, while very few demographic differences existed between comparison groups, ATC personnel had more positive job attitudes and higher job satisfaction than their non-ATC counterparts.</p> <p><i>One single quotes</i></p>			
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PREFACE

This research project was sponsored by the Leadership and Management Development Center (LMDC), Maxwell AFB, Alabama, in order to document a portion of their extensive Organizational Assessment Package (OAP) data base. Manning reductions will eliminate their consulting and research functions in the near future. The project report follows the ACSC study format where possible. There are some exceptions, however, due to requirements levied by LMDC personnel. The general format required by the LMDC was adapted from the Publication Manual of the American Psychological Association.

This project was accomplished with the invaluable assistance of several personnel from the LMDC and the Air Command and Staff College (ACSC). The author sincerely appreciates the guidance and support given by Major Mickey R. Dansby, Captain Thomas M. McFall, and Chief Master Sergeant Judith A. Vermilya of the LMDC. Additionally, Major George R. Sewell, ACSC provided excellent administrative guidance throughout the project.



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ABOUT THE AUTHOR

Major Linwood N. Chayer was commissioned in 1972 upon graduating from the United States Air Force Academy. He then spent four years at Vance AFB OK, first in Undergraduate Pilot Training (UPT) and then as a T-37 instructor pilot. Major Chayer was a flight scheduler and, after attending Air Training Command's Academic Instructor School, taught T-37 academics (flight instruments and navigation) to UPT students. He attended Squadron Officers School (SOS) while enroute to his next assignment.

In 1977, Major Chayer was assigned to the 15th Military Airlift Squadron, Norton AFB CA, as a C-141 pilot. In his two years at Norton, he served as the squadron scheduler, plans officer, and flight commander/resource manager. He upgraded to C-141 aircraft commander during this assignment.

Major Chayer then spent three years at the United States Air Force Academy in several training-related positions. As Chief of the Aviation Branch, he supervised cadet participation in all light aircraft flying programs at the Academy. He also flew T-41s as an "attached" instructor pilot with ATC's 557th Flying Training Squadron and represented the Academy as the T-41 Course Director. Major Chayer was the executive officer to the Deputy Commandant for Operations during his last year at the Academy.

From July 1982 to July 1985, Major Chayer held several positions in the North American Aerospace Defense Command (NORAD) and the newly formed Air Force Space Command. He was a missile warning officer in the NORAD Cheyenne Mountain Complex, chief of missile warning training, and executive assistant to the Deputy Chief of Staff, Operations for Combat Operations. He completed his tour in Space Command as the Director of Operations, 16th Surveillance Squadron, Shemya AFB AK.

Major Chayer's professional military education includes SOS (by correspondence and in residence) and Air Command and Staff College (ACSC) by correspondence. He will graduate from ACSC in residence in June 1986. Major Chayer earned a Bachelor of Chemistry Degree from the United States Air Force Academy and a Master's Degree in Procurement Management from Webster University, St. Louis MO. He was a distinguished graduate from Webster University with a 4.0 grade point average.

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EXECUTIVE SUMMARY

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REPORT NUMBER 86-0525

AUTHOR(S) MAJOR LINWOOD N. CHAYER, USAF

TITLE A COMPARISON OF JOB ATTITUDES: AIR TRAINING COMMAND PERSONNEL VERSUS OTHER AIR FORCE PERSONNEL

I. Purpose: To assess the job attitudes of Air Training Command (ATC) officers, enlisted, and civilian personnel to allow ATC leaders and managers to identify strengths as well as possible weaknesses concerning the job attitudes of ATC personnel.

II. Background: Air Training Command must not only recruit those people the Air Force (AF) needs to perform its mission, it must train, motivate, and help retain them also. Because virtually every Air Force member passes through ATC at some time--for most it's their first look at, and impression of, the Air Force--ATC personnel have a tremendous opportunity to influence those other AF members. Recruiting will get tougher as the military age population declines, and retaining our skilled personnel will become more difficult as the economy continues to flourish. If ATC is to meet its challenging recruiting and retention goals, and provide the positive and motivating influence to those people that come through the command, then ATC personnel must be highly qualified and have the best possible motivation and job attitudes. The Leadership and Management Development Center (LMDC), Maxwell AFB, Alabama, has been assessing the job attitudes of AF personnel for years using the Organizational Assessment Package (OAP), a detailed job attitude survey. The LMDC sponsored the present research not because of any perceived deficiencies within

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ATC, but to document a portion of their data base on paper and, at the same time, provide feedback to ATC leaders.

III. Procedures: Through a review of the organizational behavior literature, the author found general agreement about the positive correlations among job attitudes, job satisfaction, motivation, productivity, and performance. A review of the limited number of previous studies relating to the job attitudes of ATC and other Air Force personnel led to the hypotheses that ATC personnel would have significantly different, and more positive, job attitudes than other Air Force personnel. To assess the job attitudes, job satisfaction, etc. of ATC personnel and to test the hypotheses, the author analyzed the extensive job attitude data gathered by LMDC personnel through their 109-item OAP job attitude survey. In addition to the job attitude items, the OAP survey instrument and the associated answer sheet contain a small number of demographic items/questions which were examined in the present research. The data used for this research were gathered between 1 October 1981 and 16 September 1985 and included nearly 10,000 ATC respondents and over 97,000 non-ATC respondents. Job attitude comparisons were made between ATC officers, enlisted members, and civilians and their non-ATC counterparts using commonly accepted statistical analysis tests. The two-tailed t -test simply tests for a significant difference between two groups; the F -test tests the assumption of equal variances. A 95% statistical confidence level was used for the data comparisons.

IV. Results: The results of the analyses showed very few differences, demographically, between the ATC and non-ATC comparison groups. However, as Table 2 depicts, there were many significant differences between comparison groups for the 21 OAP attitudinal factors examined. Air Training Command officers, enlisted members, and civilians were significantly different from non-ATC officers, enlisted members, and civilians for 19, 20, and 20 of the 21 OAP factors respectively. For each of the 59 significant differences between groups, the ATC group had the higher mean response, generally indicating more positive job attitudes and higher job satisfaction.

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U. Conclusions: The OAP survey data base showed, as expected, that the job attitudes of ATC data base officers, enlisted members, and civilians are significantly more positive than are those of their non-ATC data base counterparts. The results indicate that ATC leaders and managers appear to be properly influencing their personnel, and that ATC is in excellent shape concerning the job attitudes of its personnel. While the OAP survey results do not prove whether or not ATC personnel are properly motivating and influencing other personnel, the strong, positive job attitudes of ATC personnel, as indicated by the present research, probably help provide the proper influence.

VI. Recommendations: Whatever ATC leaders and managers are doing to influence their personnel appears to be working, and they should continue their present practices. Some of the attitudinal differences between ATC and non-ATC personnel can be explained, in the author's opinion, by such items as selective screening of personnel for ATC duty, the rewarding nature of instructor duty, a more stable home life for ATC personnel, fewer remote assignments for ATC personnel, and the excellent locations and climates of ATC bases. While these items may help explain some of the significant differences between comparison groups for certain OAP survey factors, they do not necessarily explain why differences exist for others, such as Management/Supervision, Supervisory Communications Climate, and Organizational Communications Climate. For this reason, the Air Force, with the assistance of ATC, LMDC, and Air Force Human Resources Laboratory personnel, should complete a more in-depth analysis of ATC personnel to find out specifically why their attitudes are significantly different from, and much more positive than, other Air Force personnel. Perhaps what is working for ATC may be used by leaders and managers in other Air Force major commands to improve job attitudes, retention, and productivity.

Chapter One

INTRODUCTION

Air Training Command (ATC) is the largest training system in the world with 1,250 admissions offices and over 3,000 courses offered (Air Force Association, May 1985a). According to General Andrew P. Iosue, the Commander of Air Training Command, ATC has

an educational process second to none; ATC is the free world's largest training system. Virtually every member of the Air Force must pass through the command at some time. We feel that we have a tremendous opportunity to influence today's Air Force as well as the Air Force of the future. (Martin, 1984, p. 66)

Air Training Command not only trains nearly all new Air Force personnel but recruits them as well through the USAF Recruiting Service. The fifth largest Air Force command, ATC employs approximately 85,000 people (71,000 military and 14,000 civilians) worldwide to perform its recruiting and training functions. Air Training Command maintains 13 major installations, has assets of approximately \$4 billion, and a \$3 billion annual operating budget. Command personnel conduct basic military training, initial officer training through Officer Training School (OTS) and 150 Air Force Reserve Officer Training Corps (AFROTC) units, technical training (six technical training centers), undergraduate pilot training (six wings), pilot instructor training, undergraduate and advanced navigator training (one

wing), Air Force survival training (four locations), and various types of field training at 96 worldwide locations. "When considering the Air Training Command overall, one is struck by the sheer magnitude of the operations. . . . the mission is fundamental to national security" (Martin, 1984, p. 69).

Air Training Command's responsibilities are, indeed, significant and its influence is far reaching. Virtually all Air Force members, including Air National Guard and Air Force Reserve personnel, form their initial impressions of the Air Force from ATC and ATC personnel. Those impressions most likely influence the attitudes, motivation, and even the career intentions of new Air Force personnel. The Air Force Association (May 1985a, p. 83) summed it up this way:

ATC is "The First Command," responsible for the Air Force's most important resource--people. Specifically, ATC must recruit, train, motivate, and retain the numbers and kinds of military professionals to meet current and future Air Force mission requirements.

Although the Air Force enjoyed its best recruiting year ever in 1984 (Air Force Association, May 1985b), recruiting will get tougher in the future. The Air Force will be competing more heavily with the private sector for new recruits as the military age population continues to decline (Correll, 1985). Retention of trained Air Force personnel, especially pilots, may get tougher as the economy continues to improve and the airlines increase their hiring (Correll, 1985; Ginovsky, 1985). To meet its recruiting, training, motivation, and retention goals, ATC leaders and managers must ensure the command has the best

qualified personnel working for them and that those personnel have the best possible motivation and job attitudes.

The purpose of this research study is to assess the job attitudes of ATC officers, enlisted, and civilian personnel to allow ATC leaders and managers to identify strengths as well as possible weaknesses in their command. The tool used for this research is the Organizational Assessment Package (OAP), a job attitude survey developed jointly by the Leadership and Management Development Center (LMDC), Maxwell Air Force Base, Alabama, and the Air Force Human Resources Laboratory (AFHRL) at Brooks Air Force Base, Texas (Short, 1985).

The LMDC is sponsoring this research at this time not because of any perceived deficiencies within ATC, but because LMDC manning requirements and computer data base reductions will force a relocation of the currently available, and extensive, OAP data base to AFHRL in the near future. This research will document a portion of that data base while specifically investigating the job attitudes of ATC personnel. The present investigation pursues four goals:

1. To review relevant organizational behavior literature and background materials relative to work attitudes in general and those attitudes of ATC personnel in particular (this review leads to hypothesized differences between ATC and other Air Force personnel);

2. To compare OAP-measured demographic and job attitude data of ATC officer, enlisted, and civilian personnel with

corresponding data from Air Force personnel in other commands;

3. To analyze significant attitudinal differences between AIC personnel and other Air Force personnel; and

4. To recommend ways AIC leaders and managers can capitalize on attitudinal strengths and compensate for attitudinal weaknesses within their command.

In subsequent chapters, this report focuses on each of the goals listed. Chapter Two summarizes the literature review and includes a discussion of those factors that have the greatest impact on job attitudes. Previous studies are reviewed and summarized to determine hypotheses concerning job attitudes of AIC personnel. Chapter Three discusses the OAP survey instrument, LMDC data collection procedures, research comparison groups (AIC versus Air Force), and data analysis procedures. Next, Chapter Four presents the results of specific OAP demographic and attitudinal data comparisons for the two groups. Finally, Chapter Five discusses those results, presents the author's conclusions based upon those results, and concludes with the author's recommendations.

Chapter Two

LITERATURE REVIEW

Introduction

There are an almost limitless number of books and studies available concerning organizational behavior, but very few studies address Air Force (AF) major commands (MAJCOMs) in general or AIC specifically. This chapter briefly reviews the organizational behavior literature, focusing on two prominent theories relating to job satisfaction and motivation, and concludes with the results of previous studies more directly related to the present research.

Organizational Behavior

Organizational behavior literature explains in great depth how and why man behaves the way he does in the work environment. Two of the prominent theories relative to job satisfaction and motivation were developed by Abraham A. Maslow and Frederick Herzberg. Maslow's Hierarchy of Needs Theory states that man has five prevalent needs which must be satisfied in a certain hierarchical order. Those needs, in order of importance, are physiological, safety, belonging, esteem, and self-actualization. According to Maslow, man will satisfy his physiological (food,

water, shelter) and safety needs before he is concerned about the higher level psychological needs (belonging, esteem, and self-actualization). Once an individual has reasonably satisfied his physiological and safety needs, the job and co-workers become important factors in satisfying one's belonging needs. Esteem is met in the work environment through job feedback (praise), recognition, increased responsibility, advancement, etc. The highest order need, self-actualization, is met when an individual achieves his goals and full potential (DuBrin, 1981; Frantzve, 1983; Pytlik, 1985). Maslow's theory gives some insight into what motivates workers to perform, but does not fit all situations; for example, there is the "starving artist" who is motivated to paint even when his lowest level needs are not being met (DuBrin, 1981; Frantzve, 1983). Frederick Herzberg's research and conclusions help explain some of the conflicts in Maslow's theory.

Herzberg conducted extensive research in the 1950s concerning job attitudes, factors associated with those attitudes, and the effects of job attitudes on work performance. His research led to the development of his Motivation-Hygiene Theory. According to Herzberg, work is comprised of positive "intrinsic" factors, also called motivators or satisfiers, and negative "extrinsic" factors, called hygiene factors or dissatisfiers. The positive factors (achievement, recognition, the work itself, responsibility, advancement, and psychological growth) lead directly to job motivation and job satisfaction, while the negative factors

(company policy and administration, supervision, interpersonal relationships, working conditions, salary, status, and security) either cause dissatisfaction or prevent it, but do not "motivate" workers to perform (DuBrin, 1981; Herzberg, Mausner & Snyderman, 1966; Pytlik, 1985).

Herzberg stressed that the hygiene factors must be addressed in order to maintain the "health" of the organization; that is, a nominal level of productivity. Good salary, working conditions, supervision, and relationships are important but they should not be mistaken for motivational tools. Only challenging work, recognition for achievement, responsibility, and a chance to advance and grow will truly motivate people to excel and sustain increased performance levels. (Pytlik, 1985, p. 14)

Herzberg concluded that there was a positive relationship between job attitudes, job satisfaction, and productivity/performance (Herzberg et al., 1966). Some authors refute that conclusion (Aldag & Brief, 1979; Ford, 1969; Frantzve, 1983), but this and other theories are important because they help explain the relationships and importance of job attitudes, job satisfaction, and motivation in the work environment.

Positive (intrinsic) factors lead directly to job motivation and job satisfaction (Herzberg et al., 1966). In a 1980 study, Dirnberger (paraphrasing a 1976 Air University Review article by K. K. Crooch) concludes that "intrinsically satisfying jobs will attract and retain more [AF] members. Satisfied individuals will tend to perform more effectively and efficiently" (p. 2). Aldag and Brief (1979) state, "intrinsic motivation is positively

associated with job satisfaction" (p. 144), and Frantzve (1983) directly correlates job attitudes with job satisfaction.

Organizational behavior literature clearly shows the interrelation and importance of job attitudes, job satisfaction, and motivation in the work environment and identifies many additional factors of importance. Leaders and managers, whether civilian or military, need to be cognizant of these additional factors if they wish to maintain and retain strong, productive work forces. Some of the factors which are repeatedly discussed and highlighted in the literature include autonomy (Aldag & Brief, 1979; Hampton, Summer & Webber, 1978), achievement (Ford, 1969; Hampton et al., 1978; Herzberg et al., 1966), the use of goals (DuBrin, 1981; Frantzve, 1983; Harwell, 1984), recognition (Ford, 1969; Frantzve, 1983; Harwell, 1984; Herzberg et al., 1966; Wilkerson & Short, 1983), challenge and responsibility (Aldag & Brief, 1979; Boren, 1980; Clarke & Presenti, 1974; Ford, 1969; Herzberg et al., 1966), feedback (Boren, 1980; DuBrin, 1981; Frantzve, 1983; Hampton et al., 1978), supervision and leadership (DuBrin, 1981; Harwell, 1984; Herzberg et al., 1966), and interesting and meaningful work with the opportunity for personal growth (Aldag & Brief, 1979; Boren, 1980; Clarke & Presenti, 1974; Ford, 1969; Herzberg et al., 1966).

Directly Related Studies

Of four studies found, only two mention, and one discusses, ATC specifically. In a 1981 study, Austin, using the initial

portion of the DAP data base, compared the job attitudes of ATC T-37 and T-38 pilots with those of other Air Force pilots and officers. Austin's study was similar to the present research although much more limited. His conclusions showed significant differences between ATC pilots and other pilots and officers with ATC pilots generally having more positive attitudes than the other two groups. Austin identified work repetition, lack of autonomy, and lack of opportunity for advancement or recognition as irritants among ATC pilots (Austin, 1981). In 1980, Rieley used DAP data to compare the job attitudes and perceptions of pilots from Air Force Systems Command, ATC, Strategic Air Command, and the Tactical Air Command. Rieley's study, however, treated each MAJCOM anonymously due to the potential "sensitivity" of comparing Air Force MAJCOMs by name. Rieley found significant differences between MAJCOMs for 60% of the DAP variables (Rieley, 1980). A 1980 study by Dirnberger showed

a strong, consistent relationship between job motivation/satisfaction and command of assignment. This relationship implies that negative job satisfiers exist more in some commands than in others and that some commands may be able to increase member retention and productivity through management/supervisory actions. (p. vii)

This study did not identify any of the MAJCOMs used in the analysis, but we can begin to see, not surprisingly, that Air Force MAJCOMs do have differences in the job attitudes of their personnel.

A related 1978 study of Marine flight instructors in the Naval Air Training Command showed that those personnel within a

sister service training command felt they were doing worthwhile work, had responsible and challenging jobs, and, in spite of long working hours, were generally satisfied with their jobs (Matthews, Richardson & Buckley, 1978). This study may indicate military training instructors/teachers in general have high satisfaction with their work. The limited availability and nature of these studies highlight the need and potential value of this current research and lead to two very tentative hypotheses.

Research Hypotheses

One hypothesis of this study is that there are significant differences in the job attitudes of ATC personnel versus other Air Force personnel. A second hypothesis, based primarily upon the author's experience and perceptions of ATC and a preliminary (unpublished) study, is that ATC job attitudes will generally be higher than those of other Air Force personnel.

Chapter Three

METHOD

Introduction

The measurement and analysis of job attitudes within an organization are of little value if the users of that information do not understand its origin and treatment. This chapter explains the origin (data collection) and treatment (data analysis) for the present research effort. Specifically, it discusses the OAP survey instrument, data collection methods, the research subjects, and the data analysis procedures.

Instrumentation

The data collection instrument used for the present research is the OAP, a 109-item job attitude survey developed jointly by the LMDC and AFHRL. The roots of the survey (and the creation of the LMDC) go back to the all volunteer force and efforts by the former Air Force Chief of Staff, General David C. Jones, to improve quality of life and leadership and management practices in the Air Force (Short, 1985). Specifically,

The survey was designed to support LMDC in its mission to: (1) assist LMDC consultants and traveling teams in the identification of organizational leadership/management strengths and weaknesses; (2) provide feedback to Air Force Professional Military Education schools, and (3) establish a data base in support of

Air Force-wide organizational effectiveness research efforts. (Short, 1985, p. 2)

The OAP survey (Appendix C) contains 16 demographic items and 93 attitudinal items separated into six modules: job inventory, job desires, supervision, work group productivity, organization climate, and job related issues. The OAP survey is further separated into "factors" and "variables" (see Appendix D) to more specifically assess the results of the survey and aid the LMDC in their management consultation process.

The interested reader can find a wide variety of studies pertaining to OAP construction and analysis: Hendrix and Halverson (1979), Hightower and Short (1982), Mahr (1982), Short (1985), and Short and Hamilton (1981). These studies show the OAP to be a valid, reliable survey instrument. After a factor-by-factor analysis of the OAP, Short and Hamilton (1981) found the primary factors' reliabilities to be acceptable to excellent. In their 1982 study, Hightower and Short again found the OAP to be a valid data gathering instrument. In the most recent and comprehensive study of the OAP, Short (1985) confirmed "the use of the OAP as both a data gathering and evaluation instrument" (p. 37).

Data Collection

The data used in the present research were collected by the LMDC through their management consultation process. A brief look at that process shows the reader the data collection and follow-on procedures.

The LMDC management consultation process begins when an organizational commander, normally a wing or base commander, requests the LMDC consultation services. Leadership and Management Development Center personnel respond with a pre-visit to the requesting organization for important face-to-face contact between representatives of both organizations. A data gathering visit soon follows and is used for OAP survey administration, the key step in the data gathering process. The LMDC personnel administer the OAP survey in group sessions, over approximately a one-week period. Every available person completes the survey, which makes the results an accurate census of each organization. However, only LMDC personnel handle the completed surveys to ensure the anonymity of the participants' responses. The LMDC personnel then analyze the survey data and, approximately six weeks later, return to the organization (tailored visit) to provide specific feedback to the organizational commander and key supervisors. When specific problems are identified, LMDC personnel work with appropriate organizational personnel to develop management action plans. As a final step in the management consultation process, LMDC personnel make a follow-up visit to the organization (if warranted) four to six months after the tailored visit to assess the organization's progress (The Commander's Guide to Air Force Leadership and Management Consultation Services, 1983; Short, 1985).

All OAP data are maintained by the LMDC in two computer files: a "historical" file of OAP surveys completed through 30

September 1981 and an "active" file containing data since that time. One or both files may be accessed for research or other purposes, but the present research uses the active file (through 16 September 1985). As noted previously, the OAP survey contains 16 demographic items. However, other demographic data were collected in the administrative section of the OAP survey answer sheet and stored in the data files, to include: work group code, personnel category and pay grade, age, sex, primary Air Force specialty code (PAFSC), duty Air Force specialty code (DAFSC), base, and MAJCOM. Some of these data will be discussed, along with the 16 demographic items, in Chapter Four.

Subjects

To analyze job attitudes of ATC personnel and compare them with the rest of the Air Force, the current OAP data were divided into two groups, "ATC" personnel and "other" data base personnel (all other Air Force personnel in the data base). These two groups were further separated into officer, enlisted, and civilian personnel categories to permit a more comprehensive and meaningful comparison and analysis. Table 1 shows the actual sizes of the comparison groups. The data for this research project were gathered through OAP survey administrations at 14 ATC bases and/or direct reporting units (for the ATC groups) and 74 bases and USAF operating locations (in the continental United States and overseas) encompassing all MAJCOM'S and many other

direct reporting units or special operating agencies (for the "other" comparison groups).

Table 1
Size of Comparison Groups

Group	Officers	Enlisted	Civilians
ATC	1,369	6,649	1,900
Other	10,944	63,898	22,794

Procedures

The OAP data for this research are separated into two categories, demographic and attitudinal, and compared using different procedures in each category. Comparison 1, "Analysis of Demographic Information," is a straightforward comparison of demographic data and is used to characterize each sample group. The demographic comparison tables are located in Appendix A. Comparison 2, "Comparison of ATC Personnel to Other Data Base Personnel," compares the OAP survey responses, for 21 of the OAP factors, for six comparison groups: ATC officers versus other Air Force officers, ATC enlisted personnel versus other Air Force enlisted personnel, and ATC civilians versus other Air Force civilians. Results of these comparisons are shown in Appendix B.

For Comparison 2, statistical tests were used to determine statistically significant differences between comparison groups

for responses to each of the 21 OAP factors. The average score (mean) was computed for each OAP factor and each comparison group, and those means were compared using the two-tailed t -test, a common statistical test. An F -test was used to test the assumption of equal variances for comparison groups and, where appropriate, t -tests for unequal variance groups were used. An Alpha=.05 level of significance was used for the t -tests which means there is a 95% confidence level in the reliability of the results obtained by comparing the groups' responses. This is a commonly used and conventionally acceptable confidence level. The statistically significant differences found using these tests are shown in Chapter Four and are the primary basis for the discussion in Chapter Five.

Chapter Four

RESULTS

This chapter presents the results of Comparison 1, "Analysis of Demographic Information," and Comparison 2, "Comparison of ATC Personnel to Other Data Base Personnel."

Analysis of Demographic Information

Tables A-1 through A-20 in Appendix A depict the demographic and background data for LMDC data base responses for ATC personnel compared to those of other Air Force personnel. In most cases, ATC personnel closely match their Air Force counterparts. The following paragraphs briefly discuss the "typical" ATC data base officer, enlisted member, and civilian and pinpoint those few areas where they differ from their Air Force data base counterparts. Please keep in mind that these descriptions are based on responses to the OAP survey and may not necessarily be representative of all ATC or other Air Force personnel.

The typical ATC data base officer is a white, married male between 21 and 35 years of age. Approximately one half of the ATC officers have 8 or less years in the Air Force. Sixty percent have been in their ATC career fields for 36 months or less and have 12 months or less in their current duty positions. The majority (70%) are supervisors, supervising three or more

people (52%), but only 57% write officer effectiveness reports (OERs), airman performance reports (APRs), or civilian appraisals. Air Training Command supervisors hold group meetings, and group meetings to solve problems, more frequently than their non-ATC counterparts. Just over 50% say they will make the Air Force a career with an additional 23% responding they will "likely" make it a career. The majority (60%) have completed some professional military education (PME) and 39% hold an advanced academic degree. Typical ATC data base officers closely parallel other Air Force data base officers with few exceptions.

Other Air Force data base officers are slightly older than their ATC counterparts, and 20% more have been in their present career fields greater than 36 months. Other Air Force officers, in general, have less opportunity to supervise and, consequently, write a smaller percentage of OERs, APRs, and civilian appraisals than their ATC counterparts. Career intent is virtually identical between both groups. Other Air Force officers hold a slight edge in PME completion (65% versus 60%) and advanced degrees (46% versus 39%).

The typical ATC data base enlisted member is a white, married male between 17 and 30 years of age. Over half have 8 or more years in the Air Force and the majority (60%) have been in their present career fields for more than 36 months. Nearly 60% have been in their present duty positions 18 months or less. Almost three quarters of the ATC enlisted members are married with over 60% of their spouses employed. Thirty-five percent of the ATC

enlisted members are supervisors with 31% writing APRs or civilian appraisals. Just over half indicate they will make the Air Force a career. Thirty percent say they will "likely" or "maybe" make the Air Force a career, and 14% indicate a "likely" or positive intent to separate. More than 60% have completed some undergraduate work while an additional 5% have earned bachelor's or master's degrees. Although closely paralleling other Air Force data base enlisted members, ATC enlisted data base members have some demographic differences.

Other Air Force data base enlisted members are slightly younger than their ATC counterparts and have less time in the Air Force. Other Air Force enlisted members also have less time in their present career fields, at their present duty stations, and in their present positions. They are less likely to be married with a smaller percentage of their spouses working outside the home. Only 33% (versus 52% for ATC) indicate they will make the Air Force a career; 40% say "likely" or "maybe" to an Air Force career.

Air Training Command data base civilians are mostly female (53%), white (79%), married (76%), and 41 years of age or older (60%). More than 53% have greater than 12 years of federal service. Additionally, a large proportion have greater than 36 months in their present career fields (70%), at their present duty stations (68%), and in their present duty positions (46%). Over 73% of their spouses are employed. Slightly less than one third of the ATC civilians are supervisors. The slight majority

(51%) say they will make civil service a career while 23% say "likely" and 12% say "maybe". Just under two thirds have some college work, and 9% have a bachelor's degree, 4% a master's degree, and less than 1% a doctoral degree.

There are very few demographic differences between ATC data base civilians and other Air Force data base civilians. While the ATC civilians are mostly female, only 39% of the non-ATC civilians are female. Air Training Command civilians include more white and less Hispanic personnel. A slightly larger percentage (36%) of the ATC civilians are supervisors than are the non-ATC civilians (30%).

Comparison of ATC Personnel to Other Data Base Personnel

Statistically significant differences were found between ATC data base personnel and other Air Force data base personnel mean scores for nearly every job attitude factor measured. Table 2 depicts those significant differences, by OAP factor, for each personnel category. The plus (+) signs in Table 2 indicate those factors where the ATC personnel had the higher mean scores (generally indicating higher, more positive attitudes) as compared to other Air Force personnel. Air Training Command personnel had the higher mean scores in each case where a significant difference was found. This supports the author's hypotheses more strongly than expected. The Appendix B tables depict specific results of the analyses while the following paragraphs briefly discuss the attitudinal differences for each personnel category.

Table 2

DAP Factors and Significant Differences
Between ATC Personnel and Other Air Force Personnel

DAP Factors	Significant Differences		
	Officer	Enlisted	Civilian
Job Performance Goals	+	+	+
Task Characteristics	+	+	+
Task Autonomy		+	+
Work Repetition	+	+	+
Desired Repetitive/Easy Tasks			+
Job-Related Training	+	+	+
Skill Variety	+	+	+
Task Identity	+	+	+
Task Significance	+	+	+
Job Feedback	+	+	+
Need for Enrichment	+	+	+
Job Motivation Index	+	+	+
Work Support	+	+	+
Management/Supervision	+	+	+
Supervisory Communications Climate	+	+	+
Organizational Communications Climate	+	+	+
Pride	+	+	+
Advancement/Recognition	+	+	
Work Group Effectiveness	+	+	+
Job-Related Satisfaction	+	+	+
General Organizational Climate	+	+	+

ATC Officers versus Other Officers

Air Training Command officers' responses were significantly different from their Air Force counterparts' responses for 19 of 21 OAP factors. The only exceptions were Task Autonomy and Desired Repetitive/Easy Tasks. For each of the factors, including the two where no significant differences were found, ATC officers had the higher mean responses, generally indicating more positive attitudes and/or greater satisfaction.

ATC Enlisted Members versus Other Enlisted Members

Air Training Command enlisted members' responses were significantly higher than their Air Force counterparts' responses for 20 of the 21 OAP factors. The single exception was Desired Repetitive/Easy Tasks. Air Training Command enlisted members' higher mean responses indicate higher levels of job satisfaction and more positive job attitudes.

ATC Civilians versus Other Civilians

The only OAP factor which was not significantly different for ATC civilians versus other civilians is Advancement/Recognition. Air Training Command civilians had higher mean scores on all 21 OAP factors.

Summary

A review of the OAP survey data (and comparisons of that data) used in the present research provides interesting results for discussion. Air Training Command data base personnel closely parallel, with few exceptions, their Air Force data base

counterparts with respect to the OAP demographic and background data used for the present research. With respect to job attitudes and job satisfaction, however, AIC personnel differ markedly from their Air Force counterparts. The comparisons of OAP factors by personnel category show two distinct results: statistically significant differences for 59 of 63 (94%) of the OAP factor comparisons and higher means (generally indicating more positive job attitudes and higher job satisfaction) for AIC personnel for 59 of 59 (100%) of the significantly different comparisons. Chapter Five provides a more detailed analysis and discussion of these results.

Chapter Five

DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Introduction

The results of the present research clearly support the author's hypotheses by showing that ATC personnel, in the three categories studied, have significantly different, and much more positive, job attitudes than other Air Force personnel for nearly every OAP comparison factor. As the tables in Appendix B show, most of the significant differences were found at beyond the 99.9% confidence level versus the predetermined 95% confidence level. The following paragraphs attempt to explain those results, draw some conclusions from the results, and make some recommendations based upon the results.

Discussion

Before the results of the present research are discussed, the reader needs to be aware of the limitations in this research effort. The author believes there is one major limitation associated with the OAP survey administration and the survey results. The LMDC consultation services and OAP survey administration were initiated by the organization surveyed and not by LMDC personnel. Air Force commanders, for whatever their reasons, requested this

LMDC service. The surveys, therefore, were not administered to a random sample of organizations and the results could be biased. There is no way, however, to measure bias in the research data nor any reason to assume there is any real difference between the ATC and non-ATC data as a result of this method of survey initiation. The reader needs to remember, however, that even though the survey sample groups are reasonably large, the OAP data used for the present research only represents the attitudes of ATC data base officers versus all other Air Force data base officers, ATC data base enlisted members versus all other Air Force data base enlisted members, and ATC data base civilians versus all other Air Force data base civilians. The author does not believe that this limitation significantly impacts the results of the present research effort and assumes the data accurately depict the job attitudes of ATC personnel and other Air Force personnel.

While the OAP survey shows where attitudinal differences exist between comparison groups, how great those differences are, and to what confidence level those differences are measured, it does not explain why those differences exist. In the author's opinion, those differences are caused by a number of factors which make ATC an attractive command to work in. Those factors include such things as selective screening of Air Force personnel for ATC duty, the rewarding nature of instructor duty, a more stable home life, fewer remote assignments for ATC personnel, controlled tours, and the excellent locations and climates of ATC

bases (including the lack of northern tier bases). Those factors, and a close look at the seven OAP factors that showed the larger absolute differences in means for all three comparison groups, will help explain the job attitudinal differences between ATC and other Air Force personnel. These OAP factors are Job-Related Training, Task Significance, Management/Supervision, Supervisory Communications Climate, Organizational Communications Climate, Pride, and General Organizational Climate.

Job-Related Training

This factor measures individuals' perceptions of the technical training they received to perform their current jobs, on-the-job (OJT) instructional methods, and OJT instructors' competence. We would expect the Air Force's training command to do a superior job of training its personnel and the factor scores suggest that it is. Perhaps the attitudes of Air Training Command personnel start out more positive than their Air Force counterparts' attitudes because ATC personnel receive better training and feel better prepared to perform their jobs.

Task Significance

The Task Significance factor is derived from items 19 (To what extent is your job significant, in that it affects others in some important way?) and 27 (To what extent does doing your job well affect a lot of people?). Air Training Command personnel feel more strongly than other Air Force personnel that their work is significant and that doing it well can affect a lot of people in some important way. The author believes this is a common

attitude among instructors/teachers as shown, although not conclusively, by the Marine Flight instructor and Naval Training Command study (Matthews et al., 1978) discussed in Chapter Two.

Management/Supervision

This factor is derived from OAP items 58 through 65 and measures individuals' perceptions of their supervisors. More specifically, it depicts people's attitudes concerning their supervisors' planning abilities, establishment of high performance standards and good work procedures, encouragement of teamwork, explanation of procedures to each group member, performance under pressure, etc. There is no obvious reason why the responses to this factor should be significantly higher for ATC personnel than for other Air Force personnel. Perhaps ATC supervisors are more readily available and able to work with and help their subordinates more than other Air Force supervisors. Whatever the reasons for these more positive attitudes towards their supervisors among ATC subordinates, it appears the rest of the Air Force could learn something from ATC to strengthen their supervisor/subordinate relationships.

Supervisor Communications Climate

The OAP survey results for this factor indicate that ATC supervisors do a better job of communicating with their subordinates than do Air Force supervisors in general. Supervisory Communications Climate addresses the feedback supervisors give subordinates, whether or not supervisors seek subordinates' ideas on task improvements, and whether supervisors explain how

their jobs contribute to the mission, help subordinates set specific goals, and help subordinates improve their performance. It appears that ATC supervisors are not only communicating with their subordinates, but are helping them as well. Again, there is no reason ATC supervisors should be significantly better communicators than other Air Force supervisors, but ATC subordinates believe they are.

Organizational Communications Climate

If supervisory communications are strong and positive within an organization, one might expect to find a strong organizational communications climate as well. This appears to be the case within ATC. Air Training Command personnel have significantly more positive attitudes towards this factor than do their non-ATC counterparts. This factor deals primarily with how well the organization keeps its personnel informed, whether or not the organization has clear cut and reasonable goals, and if individuals in the organization can air their complaints satisfactorily.

Pride

This factor is the result of two OAP items, 32 (To what extent are you proud of your job?) and 46 (To what extent does your work give you a feeling of pride?). Air Training Command personnel reflected significantly higher responses to, and more favorable attitudes towards, this factor than their Air Force counterparts. One possible explanation for this difference is that ATC personnel train many new, young officers and enlisted members. Part of that training, instilling a sense of pride in

those individuals, is most effectively accomplished when the instructors have the same strong sense of pride in themselves, their work, and their organizations. Additionally, many ATC personnel are hand-picked for their positions. This might contribute to their more positive job attitudes and sense of pride in themselves and their organizations.

General Organizational Climate

Air Training Command personnel have more positive attitudes concerning their organizational climates than do their non-ATC counterparts. This result is not surprising considering the overwhelmingly positive responses of ATC personnel to all other DAP factors and the types of items that form this factor (items 87-90, 92-95, 97, and 98 in Appendix C). This factor encompasses responses about the organization's interest in its people, recognition of personnel, teamwork and cooperation among co-workers and work groups, and mission accomplishment.

Additional items, while not specifically pertaining to the General Organizational Climate factor, might help explain why ATC personnel's attitudes are much more positive than non-ATC personnel's attitudes. Air Training Command base locations should contribute positively to personnel attitudes because there are no northern and/or remote locations. Additionally, ATC personnel generally have controlled tour lengths and do not have remote tours of duty or pull alert duty away from their families. As compared to other MAJCOMs (in the author's opinion), ATC personnel have a more stable home life. Perhaps, above all else, ATC

leaders and managers are simply doing a superb job of motivating their personnel and creating a great work environment for them.

Conclusions

The OAP survey data and comparison results for this research support the following conclusions:

1. Job attitudes of ATC data base officers are significantly more positive than those of all other data base officers.

2. Job attitudes of ATC data base enlisted members are significantly more positive than those of all other data base enlisted members.

3. Job attitudes of ATC data base civilians are significantly more positive than those of all other data base civilians.

4. Survey results do not indicate any job attitude weaknesses that ATC leaders and managers need to improve upon; ATC is in excellent shape concerning the job attitudes of its personnel.

Whether or not ATC personnel are motivating and otherwise positively influencing current and future Air Force members cannot be proven through the OAP survey. However, the strong, positive attitudes of ATC personnel indicated by this research most likely help provide the proper influence. Air Training Command leaders and managers seem to be properly influencing their personnel as well, but they must continue their efforts to keep personnel attitudes strong. That these influences, and positive job attitudes, are stronger for virtually every OAP factor is significant and the basis for the recommendations that follow.

Recommendations

1. Whatever ATC leaders and managers are doing to influence and motivate their personnel, it is obviously working. Air Training Command leaders and managers should continue their present practices.

2. The Air Force, with the assistance of ATC, LMDC, and AFHRL personnel, should complete a more in-depth analysis of ATC personnel to determine specifically why their attitudes are significantly different, and more positive across-the-board, from other Air Force personnel.

3. The Air Force should then apply the information gained from the in-depth study to improve the job attitudes of non-ATC personnel.

Dirnberger (1980) states, "... negative job satisfiers exist more in some commands than in others and that some commands may be able to increase member retention and productivity through management/supervisory actions" (p. viii). This author concludes that ATC has positive job satisfiers that may be useful for managers/supervisors in other Air Force MAJCOMs to improve job attitudes, retention, and productivity.

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APPENDIX

APPENDIX A

DEMOGRAPHIC AND BACKGROUND INFORMATION

Appendix A

Table A-1

Sex by Personnel Category

	ATC		Data Base	
	Male(%)	Female(%)	Male(%)	Female(%)
n -	8,185	1,713	79,349	17,923
Officer	15.0	8.0	12.0	7.7
Enlisted	74.1	33.9	70.7	42.9
Civilian	10.9	58.1	17.3	49.4

Table A-2

Age by Personnel Category

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n -	1,369	6,649	1,899	10,944	63,891	22,789
17 to 20 Yrs	00.0	8.7	.9	00.0	14.3	1.2
21 to 25 Yrs	15.8	25.8	5.1	11.8	39.3	6.3
26 to 30 Yrs	29.9	20.3	9.4	27.7	19.4	10.6
31 to 35 Yrs	21.0	23.1	13.0	23.8	13.6	14.5
36 to 40 Yrs	19.4	17.0	11.8	19.6	9.0	14.2
41 to 45 Yrs	9.7	3.9	12.8	11.3	2.8	12.5
46 to 50 Yrs	3.1	.7	15.3	3.5	.7	13.9
> 50 Yrs	1.0	.5	31.6	2.3	.7	26.7

Table A-3

Time in Air Force

	ATC			Data Base		
	OFF(%)	Enl(%)	Civ(%)	OFF(%)	Enl(%)	Civ(%)
n =	1,367	6,641	1,601	10,925	63,719	20,284
< 1 Yr	1.5	4.2	5.0	3.6	7.3	5.1
1 to 2 Yrs	5.3	8.0	4.9	5.4	12.5	5.1
2 to 3 Yrs	10.5	7.7	4.4	7.3	13.0	5.3
3 to 4 Yrs	8.9	7.9	5.0	6.9	11.7	4.9
4 to 8 Yrs	21.8	16.5	13.5	21.5	20.9	11.7
8 to 12 Yrs	15.7	15.7	13.4	16.2	12.6	12.4
> 12 Yrs	36.4	40.0	53.8	39.2	22.0	55.5

Table A-4

Months in Present Career Field

	ATC			Data Base		
	OFF(%)	Enl(%)	Civ(%)	OFF(%)	Enl(%)	Civ(%)
n =	1,363	6,628	1,845	10,865	63,509	22,200
< 6 Mos	6.2	4.8	5.9	5.2	4.9	5.6
6 to 12 Mos	13.6	6.7	5.9	7.0	8.2	7.4
12 to 18 Mos	10.3	7.8	6.2	7.6	8.3	6.0
18 to 36 Mos	29.7	20.3	11.9	20.5	20.9	13.6
> 36 Mos	40.2	60.4	70.2	59.7	57.7	67.3

Table A-5

Months at Present Duty Station

	ATC			Data Base		
	OFF(%)	Enl(%)	Civ(%)	OFF(%)	Enl(%)	Civ(%)
n =	1,364	6,608	1,839	10,912	63,586	22,286
< 6 Mos	8.7	12.2	6.1	14.4	15.7	6.3
6 to 12 Mos	17.2	15.0	6.6	16.6	18.9	8.0
12 to 18 Mos	13.6	15.4	6.5	16.6	16.2	6.2
18 to 36 Mos	40.4	30.3	13.2	35.3	32.4	15.3
> 36 Mos	20.2	27.1	67.6	17.1	16.9	64.2

Appendix A

Table A-6

Months in Present Position

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,363	6,611	1,865	10,904	63,491	22,412
< 6 Mos	24.9	22.5	12.5	26.4	28.3	14.0
6 to 12 Mos	29.1	20.4	13.0	24.3	24.5	15.0
12 to 18 Mos	16.4	16.7	10.8	17.0	16.3	10.2
18 to 36 Mos	24.9	25.4	17.5	24.8	22.4	19.8
> 36 Mos	4.8	15.0	46.2	7.4	8.6	41.0

Table A-7

Ethnic Group

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,367	6,615	1,864	10,885	63,432	22,446
White	89.9	74.5	78.8	87.2	71.3	66.3
Black	4.4	13.4	7.5	6.1	16.6	9.7
Hispanic	2.1	5.5	7.2	2.4	5.2	16.9
Other	3.6	6.6	6.5	4.3	6.9	7.1

Table A-8

Marital Status

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,367	6,646	1,888	10,935	63,773	22,732
Not Married	21.9	24.8	17.2	20.9	36.6	18.7
Married	77.1	73.1	76.4	77.4	61.1	75.3
Single Parent	1.0	2.2	6.4	1.6	2.3	6.0

Table A-9

Spouse Status: ATC

	Geographically Separated			--Not Geo. Separated--		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	57	316	90	997	4,539	1,352
Civilian Employed	61.4	63.0	66.7	40.5	50.6	61.3
Not Employed	19.3	25.0	13.3	53.0	40.3	26.9
Military Member	19.3	12.0	20.0	6.5	9.1	11.8

Table A-10

Spouse Status: Data Base

	Geographically Separated			--Not Geo. Separated--		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	361	3,187	979	8,105	35,768	16,134
Civilian Employed	58.7	58.1	69.4	33.7	36.3	53.5
Not Employed	20.2	26.6	18.1	57.4	48.9	34.9
Military Member	21.1	15.3	12.5	8.9	14.8	11.6

Table A-11

Educational Level

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,368	6,631	1,872	10,913	63,655	22,486
Non-HS Grad	0.0	0.5	6.6	0.0	0.8	5.3
HS Grad or GED	0.3	33.5	31.9	0.2	46.4	28.8
< 2 Yrs College	0.0	37.6	27.9	0.3	34.3	23.5
> 2 Yrs College	0.9	23.3	20.8	1.4	15.0	18.2
Bachelors Degree	60.2	4.4	8.9	52.1	3.0	15.8
Masters Degree	33.4	0.7	3.5	37.7	0.5	7.3
Doctoral Degree	5.3	0.0	0.3	8.2	0.0	1.1

Appendix A

Table A-12

Professional Military Education

	-----ATC-----		-----Data Base-----	
	Off(%)	Enl(%)	Off(%)	Enl(%)
n =	1,367	6,640	10,930	63,741
None	38.3	22.5	33.8	31.6
Phase 1 or 2	.7	22.9	1.1	29.9
Phase 3	1.2	20.8	1.2	18.9
Phase 4	1.5	22.7	.8	11.5
Senior NCO Academy	.2	8.5	.1	4.9
Sq Officer School	27.4	.2	26.7	.2
Int Service School	21.5	2.2	23.6	2.9
Snr Service School	9.2	.2	12.7	.1

Table A-13

Number of People Directly Supervised

	-----ATC-----			-----Data Base-----		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,361	6,107	1,879	10,894	57,902	22,691
None	33.5	65.0	70.0	45.9	59.8	75.4
1 Person	7.7	5.4	4.5	6.7	7.8	2.2
2 People	9.3	4.6	2.8	5.6	7.5	2.0
3 People	12.1	3.5	3.4	7.0	5.7	2.2
4 to 5 People	14.9	5.4	4.4	12.8	8.2	4.5
6 to 8 People	11.8	6.6	4.0	9.3	4.6	3.7
9 or > People	10.7	9.5	10.8	12.7	6.5	9.9

Table A-14

Number of People for Whom Respondent Writes DER/APR/Appraisal

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,364	6,643	1,890	10,917	63,670	22,729
None	43.0	69.2	74.7	52.5	66.3	79.1
1 Person	10.4	6.0	4.2	9.1	8.9	1.9
2 People	9.1	5.1	3.0	6.7	8.1	1.8
3 People	9.9	3.9	3.1	6.8	5.8	2.0
4 to 5 People	12.5	4.9	4.2	11.2	7.2	3.8
6 to 8 People	9.8	4.5	2.7	8.2	2.2	3.2
9 or > People	5.3	6.4	8.1	5.4	1.5	8.2

Table A-15

Supervisor Writes Respondent's DER/APR/Appraisal

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,347	6,577	1,827	10,778	62,936	22,008
Yes	82.9	80.0	82.4	76.8	69.3	77.5
No	9.8	12.2	8.8	14.8	19.4	9.6
Not Sure	7.3	7.8	8.8	8.4	11.3	12.9

Table A-16

Work Schedule

	ATC			Data Base		
	Off(%)	Enl(%)	Civ(%)	Off(%)	Enl(%)	Civ(%)
n =	1,357	6,589	1,856	10,830	63,257	22,278
Day Shift	58.9	63.4	88.3	59.4	59.7	87.9
Swing Shift	0.0	5.1	3.6	0.3	7.6	3.2
Mid Shift	0.1	2.4	0.4	0.1	3.1	0.8
Rotating Shifts	7.1	6.4	4.2	4.4	14.2	4.6
Irregular Schedule	22.1	18.2	2.9	11.3	11.6	2.2
Freq TDY/On-call	6.6	4.1	0.3	8.3	2.3	1.0
Crew Schedule	5.2	0.5	0.2	16.2	1.4	0.4

Appendix A

Table A-17

Supervisor Holds Group Meetings

	ATC			Data Base		
	OFF(%)	Enl(%)	Civ(%)	OFF(%)	Enl(%)	Civ(%)
n =	1,359	6,566	1,870	10,805	62,836	22,423
Never	3.7	9.4	10.4	7.0	17.2	10.0
Occasionally	14.9	34.8	34.8	24.0	33.7	34.7
Monthly	7.4	17.2	8.7	14.4	7.8	19.5
Weekly	51.0	28.4	41.4	41.2	27.3	29.4
Daily	21.1	7.2	3.0	11.3	11.9	4.6
Continuously	2.0	3.1	1.8	2.1	2.1	1.8

Table A-18

Supervisor Holds Group Meetings to Solve Problems

	ATC			Data Base		
	OFF(%)	Enl(%)	Civ(%)	OFF(%)	Enl(%)	Civ(%)
n =	1,350	6,551	1,842	10,749	62,409	22,118
Never	8.7	17.1	21.7	16.1	25.8	24.4
Occasionally	40.8	39.6	41.3	42.8	39.8	45.1
Half the Time	25.9	18.0	15.0	21.4	16.6	15.4
Always	24.7	25.4	22.0	19.6	17.8	15.1

Table A-19

Aeronautical Rating and Current Status

	ATC		Data Base	
	OFF(%)	Enl(%)	OFF(%)	Enl(%)
n =	1,357	6,292	10,786	62,963
Nonrated, Not on Aircrew	55.6	94.6	62.0	90.2
Nonrated, Now on Aircrew	0.2	0.7	2.7	2.2
Rated, on Crew/Ops Job	35.2	0.8	25.9	1.7
Rated, in Support Job	9.0	3.9	9.4	5.9

Table A-20

Career Intent

	ATC			Data Base		
	OFF(%)	Enl(%)	Civ(%)	OFF(%)	Enl(%)	Civ(%)
n =	1,362	6,629	1,562	10,882	63,518	19,633
Retire 12 Mos	2.2	4.5	7.2	3.6	2.9	6.2
Career	51.1	51.6	50.7	51.2	33.1	51.4
Likely Career	22.5	15.4	22.8	22.4	19.1	23.5
Maybe Career	17.3	14.4	12.5	14.7	21.3	12.7
Likely Separate	4.3	8.6	3.8	5.1	14.1	3.4
Separate	2.6	5.6	2.9	2.9	9.4	2.8

Note: The number (n) is the total number of valid responses for the factor being examined. These numbers are not the same each time, and differ slightly from the numbers in Table 1, due to invalid responses on survey response sheets. Invalid responses include those that are not marked, are marked twice, etc.

APPENDIX

2

APPENDIX B

COMPARISON OF ATC PERSONNEL TO OTHER DATA BASE PERSONNEL

Appendix B

Table B-1

Comparison of OAP Factor Scores
Between ATC and Other Officers

----- THE WORK ITSELF -----					
	Number of Cases	Mean	Standard Deviation	^a df	t

Job Performance Goals				11836	6.18 ***
ATC Officers	1,330	4.88	0.95		
Other Officers	10,508	4.70	0.99		
Task Characteristics				1813	6.97 ***
ATC Officers	1,336	5.49	0.84		
Other Officers	10,563	5.32	0.96		
Task Autonomy				1637	1.10
ATC Officers	1,331	4.60	1.44		
Other Officers	10,601	4.55	1.35		
Work Repetition				12111	7.08 ***
ATC Officers	1,356	4.56	1.37		
Other Officers	10,757	4.28	1.37		
Desired Repetitive/ Easy Tasks				11748	1.09
ATC Officers	1,309	2.51	1.05		
Other Officers	10,441	2.47	1.05		
Job-Related Training				9592	5.51 ***
ATC Officers	1,115	4.92	1.44		
Other Officers	8,479	4.66	1.48		

^a
Approximate degrees of freedom (df) are given when t-test
for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Table B-1 (Continued)

JOB ENRICHMENT					
	Number of Cases	Mean	Standard Deviation	^a df	t
Skill Variety				1784	4.72 ***
ATC Officers	1,360	5.58	1.19		
Other Officers	10,835	5.42	1.29		
Task Identity				1771	5.27 ***
ATC Officers	1,357	5.38	1.14		
Other Officers	10,803	5.20	1.22		
Task Significance				1894	9.03 ***
ATC Officers	1,360	6.04	1.05		
Other Officers	10,851	5.76	1.27		
Job Feedback				1789	2.60 **
ATC Officers	1,358	4.96	1.09		
Other Officers	10,823	4.88	1.19		
Need for Enrichment				1700	2.81 **
ATC Officers	1,321	6.15	0.83		
Other Officers	10,585	6.08	0.87		
Job Motivation Index				11138	3.49 ***
ATC Officers	1,266	132.51	69.36		
Other Officers	9,874	125.48	67.10		

^a

Approximate degrees of freedom (df) are given when t-test for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Appendix B

Table B-1 (Continued)

WORK GROUP PROCESS					
	Number of Cases	Mean	Standard Deviation	^a df	t
Work Support				11739	6.96 ***
ATC Officers	1,324	4.76	1.05		
Other Officers	10,417	4.54	1.09		
Management/Supervision				1729	6.04 ***
ATC Officers	1,306	5.51	1.24		
Other Officers	10,198	5.29	1.35		
Supervisory Communications				1643	5.43 ***
ATC Officers	1,250	5.05	1.31		
Other Officers	9,995	4.84	1.43		
Organizational Communications				1728	9.03 ***
ATC Officers	1,295	5.16	1.15		
Other Officers	10,048	4.85	1.27		

^a
Approximate degrees of freedom (df) are given when t-test for groups with unequal variance is used.

*p < .05.

**p < .01.

***p < .001.

Table B-1 (Continued)

WORK GROUP OUTPUT					
	Number of Cases	Mean	Standard Deviation	a df	t
Pride				1812	9.47 ***
ATC Officers	1,353	5.78	1.25		
Other Officers	10,794	5.44	1.41		
Advancement/Recognition				11660	4.61 ***
ATC Officers	1,310	4.72	1.18		
Other Officers	10,352	4.56	1.19		
Work Group Effectiveness				1820	8.83 ***
ATC Officers	1,325	5.99	0.93		
Other Officers	10,457	5.74	1.10		
Job-Related Satisfaction				1634	8.41 ***
ATC Officers	1,249	5.59	1.03		
Other Officers	9,741	5.33	1.10		
General Organizational Climate				1666	7.15 ***
ATC Officers	1,286	5.43	1.19		
Other Officers	10,138	5.17	1.26		

a

Approximate degrees of freedom (df) are given when t-test for groups with unequal variance is used.

*p < .05.

**p < .01.

***p < .001.

Appendix B

Table B-2
Comparison of OAP Factor Scores
Between ATC and Other Enlisted Personnel

----- THE WORK ITSELF -----					
	Number of Cases	Mean	Standard Deviation	^a df	t

Job Performance Goals				67874	21.65 ***
ATC Enlisted	6,398	4.99	0.96		
Other Enlisted	61,478	4.71	0.98		
Task Characteristics				7914	32.05 ***
ATC Enlisted	6,403	5.41	0.97		
Other Enlisted	60,689	5.00	1.00		
Task Autonomy				67395	27.05 ***
ATC Enlisted	6,400	4.29	1.43		
Other Enlisted	60,997	3.79	1.41		
Work Repetition				8088	6.30 ***
ATC Enlisted	6,562	5.23	1.33		
Other Enlisted	62,801	5.12	1.37		
Desired Repetitive/ Easy Tasks				7769	-1.92
ATC Enlisted	6,434	3.19	1.45		
Other Enlisted	61,659	3.22	1.41		
Job-Related Training				66372	16.50 ***
ATC Enlisted	6,249	4.79	1.57		
Other Enlisted	60,125	4.44	1.58		

^a
Approximate degrees of freedom (df) are given when t-test
for groups with unequal variances is used.

*p < .05.

**p < .01.

p < .001.

Table B-2 (Continued)

JOB ENRICHMENT					
	Number of Cases	Mean	Standard Deviation	^a df	t
Skill Variety				8063	25.43 ***
ATC Enlisted	6,562	5.02	1.42		
Other Enlisted	62,731	4.55	1.45		
Task Identity				8135	25.91 ***
ATC Enlisted	6,577	5.42	1.20		
Other Enlisted	62,829	5.01	1.25		
Task Significance				8476	25.04 ***
ATC Enlisted	6,593	6.04	1.16		
Other Enlisted	63,217	5.66	1.32		
Job Feedback				69610	22.85 ***
ATC Enlisted	6,582	5.10	1.27		
Other Enlisted	63,030	4.72	1.29		
Need for Enrichment				8057	21.65 ***
ATC Enlisted	6,418	5.77	1.16		
Other Enlisted	61,210	5.44	1.24		
Job Motivation Index				6940	31.14 ***
ATC Enlisted	6,012	127.83	72.70		
Other Enlisted	56,695	97.55	61.09		

^a

Approximate degrees of freedom (df) are given when t-test for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Appendix B

Table B-2 (Continued)

WORK GROUP PROCESS					
	Number of Cases	Mean	Standard Deviation	a df	t
Work Support				67816	25.73 ***
ATC Enlisted	6,401	4.87	1.11		
Other Enlisted	61,417	4.50	1.11		
Management/Supervision				7779	18.50 ***
ATC Enlisted	6,270	5.23	1.51		
Other Enlisted	59,535	4.86	1.58		
Supervisory Communications				7738	23.74 ***
ATC Enlisted	6,279	4.97	1.59		
Other Enlisted	59,778	4.47	1.63		
Organizational Communications				64623	20.77 ***
ATC Enlisted	6,250	4.70	1.31		
Other Enlisted	58,375	4.34	1.31		

a
Approximate degrees of freedom (df) are given when t-test
for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Table B-2 (Continued)

WORK GROUP OUTPUT					
	Number of Cases	Mean	Standard Deviation	^a df	t
Pride				8214	30.28 ***
ATC Enlisted	6,539	5.45	1.53		
Other Enlisted	62,631	4.84	1.65		
Advancement/Recognition				66891	18.38 ***
ATC Enlisted	6,302	4.53	1.20		
Other Enlisted	60,591	4.24	1.19		
Work Group Effectiveness				7985	18.63 ***
ATC Enlisted	6,366	5.72	1.16		
Other Enlisted	60,625	5.44	1.25		
Job-Related Satisfaction				7555	26.16 ***
ATC Enlisted	6,013	5.33	1.16		
Other Enlisted	54,908	4.92	1.22		
General Organizational Climate				7637	32.57 ***
ATC Enlisted	6,184	4.94	1.35		
Other Enlisted	58,379	4.35	1.39		

^a Approximate degrees of freedom (df) are given when t-test for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Appendix B

Table B-3

Comparison of OAP Factor Scores Between ATC and Other Civilians

THE WORK ITSELF					
	Number of Cases	Mean	Standard Deviation	a df	t
Job Performance Goals				2177	9.39 ***
ATC Civilians	1,812	5.05	0.93		
Other Civilians	21,681	4.84	1.00		
Task Characteristics				2163	10.70 ***
ATC Civilians	1,790	5.52	0.87		
Other Civilians	21,425	5.29	0.96		
Task Autonomy				23681	6.15 ***
ATC Civilians	1,829	4.77	1.35		
Other Civilians	21,854	4.57	1.35		
Work Repetition				2213	8.21 ***
ATC Civilians	1,857	4.90	1.36		
Other Civilians	22,334	4.63	1.44		
Desired Repetitive/ Easy Tasks				2132	3.58 ***
ATC Civilians	1,836	3.21	1.44		
Other Civilians	21,813	3.08	1.39		
Job-Related Training				21958	6.64 ***
ATC Civilians	1,610	4.74	1.64		
Other Civilians	20,350	4.45	1.68		

a
Approximate degrees of freedom (df) are given when t-test
for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Table B-3 (Continued)

JOB ENRICHMENT					
	Number of Cases	Mean	Standard Deviation	a df	t
Skill Variety				24147	3.49 ***
ATC Civilians	1,855	5.18	1.35		
Other Civilians	22,294	5.07	1.37		
Task Identity				2241	8.82 ***
ATC Civilians	1,864	5.55	1.09		
Other Civilians	22,344	5.32	1.18		
Task Significance				2323	11.42 ***
ATC Civilians	1,871	5.99	1.08		
Other Civilians	22,390	5.69	1.27		
Job Feedback				2248	8.62 ***
ATC Civilians	1,873	5.28	1.19		
Other Civilians	22,389	5.04	1.27		
Need For Enrichment				23422	2.03 *
ATC Civilians	1,806	5.75	1.19		
Other Civilians	21,618	5.69	1.18		
Job Motivation Index				1953	8.98 ***
ATC Civilians	1,685	146.51	73.05		
Other Civilians	20,006	129.93	70.02		

a
Approximate degrees of freedom (df) are given when t-test for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Appendix B

Table B-3 (Continued)

WORK GROUP PROCESS					
	Number of Cases	Mean	Standard Deviation	^a df	t
Work Support				2141	12.15 ***
ATC Civilians	1,800	4.96	1.06		
Other Civilians	21,662	4.64	1.11		
Management/Supervision				22834	8.13 ***
ATC Civilians	1,778	5.28	1.62		
Other Civilians	21,058	4.95	1.64		
Supervisory Communications				22736	7.19 ***
ATC Civilians	1,743	4.85	1.71		
Other Civilians	20,995	4.55	1.70		
Organizational Communications				2075	11.26 ***
ATC Civilians	1,740	4.96	1.35		
Other Civilians	20,620	4.58	1.41		

^a

Approximate degrees of freedom (df) are given when t-test for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

Table B-3 (Continued)

WORK GROUP OUTPUT					
	Number of Cases	Mean	Standard Deviation	^a df	t
Pride				2226	6.89 ***
ATC Civilians	1,865	5.63	1.37		
Other Civilians	22,325	5.40	1.45		
Advancement/Recognition				22528	1.77
ATC Civilians	1,713	3.85	1.38		
Other Civilians	20,817	3.79	1.34		
Work Group Effectiveness				2152	5.60 ***
ATC Civilians	1,809	5.79	1.20		
Other Civilians	21,550	5.62	1.26		
Job-Related Satisfaction				2038	6.88 ***
ATC Civilians	1,704	5.59	1.03		
Other Civilians	20,261	5.41	1.09		
General Organizational Climate				22298	9.80 ***
ATC Civilians	1,722	5.10	1.36		
Other Civilians	20,578	4.76	1.39		

^a

Approximate degrees of freedom (df) are given when t-test for groups with unequal variances is used.

*p < .05.

**p < .01.

***p < .001.

APPENDIX

APPENDIX C

ORGANIZATIONAL ASSESSMENT PACKAGE

Appendix C

- Organizational Assessment Package

PRIVACY ACT STATEMENT

In accordance with D.O.D. Directive 5400.11, Personal Privacy and Rights of Individuals Regarding Their Personnel Records, the following information about this survey is provided:

- a. Authority: 10 U.S.C., 131.
- b. Principal Purpose: The survey is being conducted to assess your organization from a leadership and management perspective.
- c. Routine Uses: Information provided by respondents will be treated confidentially. The averaged data will be used for organizational strength and weakness identification and research development purposes.
- d. Participation: Response to this survey is voluntary. Your cooperation in this effort is appreciated.

SCN 84-96
Expires 31 Dec 85

GENERAL INFORMATION

The leaders of your organization are genuinely interested in improving the overall conditions within their areas of responsibility. Providing a more satisfying Air Force way of life and increasing organizational effectiveness are also goals. One method of reaching these goals is by continual refinement of the management processes of the Air Force. Areas of concern include job related issues such as leadership and management; training and utilization; motivation of and concern for people; and the communication process.

This survey is intended to provide a means of identifying areas within your organization needing the greatest emphasis in the immediate future. You will be asked questions about your job, work group, supervisor, and organization. For the results to be useful, it is important that you respond to each statement thoughtfully, honestly, and as frankly as possible. Remember, this is not a test, there are no right or wrong responses.

Your completed response sheet will be processed by automated equipment, and be summarized in statistical form. Your individual response will remain confidential, as it will be combined with the responses of many other persons, and used for organizational feedback and possibly Air Force wide studies.

KEY WORDS

The following should be considered as key words throughout the survey:

- Supervisor: The person who gives you your day-to-day guidance in accomplishing your job.
- Work Group: All persons who work for the same supervisor that you do.
- Organization: Your squadron. However, if you work in staff/support agencies, the division or depot would be your organization.

Appendix C

INSTRUCTIONS

1. All statements may be answered by filling in the appropriate spaces on the response sheet provided. If you do not find a response that fits your case exactly, use the one that is the closest to the way you feel.
2. Be sure that you have completed Section 1 of the response sheet, as instructed by the survey administrator, before beginning Section 2.
3. Please use the pencil provided, and observe the following:
 - Make heavy black marks that fill the spaces.
 - Erase cleanly any responses you wish to change.
 - Make no stray markings of any kind on the response sheet.
 - Do not staple, fold or tear the response sheet.
 - Do not make any markings on the survey booklet.
4. The response sheet has a 0-7 scale. The survey statements normally require a 1-7 response. Use the zero (0) response only if the statement truly does not apply to your situation. Statements are responded to by marking the appropriate space on the response sheet as in the following example:

Using the scale below, evaluate the sample statement.

- | | |
|--------------------------------|----------------------|
| 1 - Strongly disagree | 5 - Slightly agree |
| 2 - Moderately disagree | 6 - Moderately agree |
| 3 - Slightly disagree | 7 - Strongly agree |
| 4 - Neither agree nor disagree | |

Sample Statement. The information your work group receives from other work groups is helpful.

If you moderately agree with the sample statement, you would blacken the oval (6) on the response sheet.

NA

Sample Response: (0) (1) (2) (3) (4) (5) (6) (7)

5. When you have completed the survey, please turn in the survey materials as instructed in the introduction.

BACKGROUND INFORMATION

This section of the survey concerns your background. The information requested is to insure that the groups you belong to are accurately represented and not to identify you as an individual. Please use the separate response sheet and darken the oval which corresponds to your response to each question.

1. Total years in the Air Force:

1. Less than 1 year.
2. More than 1 year, less than 2 years.
3. More than 2 years, less than 3 years.
4. More than 3 years, less than 4 years.
5. More than 4 years, less than 8 years.
6. More than 8 years, less than 12 years.
7. More than 12 years.

2. Total months in present career field:

1. Less than 1 month.
2. More than 1 month, less than 6 months.
3. More than 6 months, less than 12 months.
4. More than 12 months, less than 18 months.
5. More than 18 months, less than 24 months.
6. More than 24 months, less than 36 months.
7. More than 36 months.

3. Total months at this station:

1. Less than 1 month.
2. More than 1 month, less than 6 months.
3. More than 6 months, less than 12 months.
4. More than 12 months, less than 18 months.
5. More than 18 months, less than 24 months.
6. More than 24 months, less than 36 months.
7. More than 36 months.

4. Total months in present position:

1. Less than 1 month.
2. More than 1 month, less than 6 months.
3. More than 6 months, less than 12 months.
4. More than 12 months, less than 18 months.
5. More than 18 months, less than 24 months.
6. More than 24 months, less than 36 months.
7. More than 36 months.

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5. Your Ethnic Group is:

1. American Indian or Alaskan Native
2. Asian or Pacific Islander
3. Black, not of Hispanic Origin
4. Hispanic
5. White, not of Hispanic Origin
6. Other

6. Your highest education level attained is:

1. Non-high school graduate
2. High school graduate or GED
3. Less than two years college
4. Two years or more college
5. Bachelors Degree
6. Masters Degree
7. Doctoral Degree

7. Highest level of professional military education (residence or correspondence):

0. None or not applicable
1. NCO Orientation Course of USAF Supervisor Course (NCO Phase 1 or 2)/NCO Preparatory Course.
2. NCO Leadership School (NCO Phase 3)
3. NCO Academy (NCO Phase 4)
4. Senior NCO Academy (NCO Phase 5)
5. Squadron Officer School
6. Intermediate Service School (i.e., ACSC, or equivalent)
7. Senior Service School (i.e., AWC, ICAF, NWC)

8. How many people do you directly supervise?

- | | |
|---------|--------------|
| 1. None | 4. 3 |
| 2. 1 | 5. 4 to 5 |
| 3. 2 | 6. 6 to 8 |
| | 7. 9 or more |

9. For how many people do you write performance reports?

- | | |
|---------|--------------|
| 1. None | 4. 3 |
| 2. 1 | 5. 4 to 5 |
| 3. 2 | 6. 6 to 8 |
| | 7. 9 or more |

Appendix C

10. Does your supervisor actually write your performance reports?

1. yes 2. no 3. not sure

11. Which of the following "best" describes your marital status?

- 0. Not Married
- 1. Married: Spouse is a civilian employed outside home.
- 2. Married: Spouse is a civilian employed outside home - geographically separated.
- 3. Married: Spouse not employed outside home.
- 4. Married: Spouse not employed outside home - geographically separated.
- 5. Married: Spouse is a military member.
- 6. Married: Spouse is a military member - geographically separated.
- 7. Single Parent.

12. What is your usual work schedule?

- 1. Day shift, normally stable hours.
- 2. Swing shift (about 1600-2400)
- 3. Mid shift (about 2400-0800)
- 4. Rotating shift schedule
- 5. Day or shift work with irregular/unstable hours.
- 6. Frequent IDY/travel or frequently on-call to report to work.
- 7. Crew schedule

13. How often does your supervisor hold group meetings?

- | | | |
|-----------------|------------|-----------------|
| 1. Never | 3. Monthly | 5. Daily |
| 2. Occasionally | 4. Weekly | 6. Continuously |

14. How often are group meetings used to solve problems and establish goals?

- | | |
|-----------------|------------------------|
| 1. Never | 3. About half the time |
| 2. Occasionally | 4. All of the time |

15. What is your aeronautical rating and current status?

- | | |
|-----------------------------|----------------------------------|
| 1. Nonrated, not on aircrew | 3. Rated, in crew/operations job |
| 2. Nonrated, now on aircrew | 4. Rated, in support job |

Appendix C

16. Which of the following best describes your career or employment intentions?

1. Planning to retire in the next 12 months
2. Will continue in/with the Air Force as a career
3. Will most likely continue in/with the Air Force as a career
4. May continue in/with the Air Force
5. Will most likely not make the Air Force a career
6. Will separate/terminate from the Air Force as soon as possible.

JOB INVENTORY

Below are items which relate to your job. Read each statement carefully and then decide to what extent the statement is true of your job. Indicate the extent to which the statement is true for your job by choosing the phrase which best represents your job.

- | | |
|-----------------------------|------------------------------|
| 1 - Not at all | 5 - To a fairly large extent |
| 2 - To a very little extent | 6 - To a great extent |
| 3 - To a little extent | 7 - To a very great extent |
| 4 - To a moderate extent | |

Select the corresponding number for each question and enter it on the separate response sheet.

17. To what extent does your job require you to do many different things, using a variety of your talents and skills?
18. To what extent does your job involve doing a whole task or unit of work?
19. To what extent is your job significant, in that it affects others in some important way?
20. To what extent does your job provide a great deal of freedom and independence in scheduling your work?
21. To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?
22. To what extent are you able to determine how well you are doing your job without feedback from anyone else?

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- | | |
|-----------------------------|------------------------------|
| 1 - Not at all | 5 - To a fairly large extent |
| 2 - To a very little extent | 6 - To a great extent |
| 3 - To a little extent | 7 - To a very great extent |
| 4 - To a moderate extent | |

23. To what extent do additional duties interfere with the performance of your primary job?
24. To what extent do you have adequate tools and equipment to accomplish your job?
25. To what extent is the amount of work space provided adequate?
26. To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?
27. To what extent does doing your job well affect a lot of people?
28. To what extent does your job provide you with the chance to finish completely the piece of work you have begun?
29. To what extent does your job require you to use a number of complex skills?
30. To what extent does your job give you freedom to do your work as you see fit?
31. To what extent are you allowed to make the major decisions required to perform your job well?
32. To what extent are you proud of your job?
33. To what extent do you feel accountable to your supervisor in accomplishing your job?
34. To what extent do you know exactly what is expected of you in performing your job?
35. To what extent are your job performance goals difficult to accomplish?
36. To what extent are your job performance goals clear?
37. To what extent are your job performance goals specific?

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- | | |
|-----------------------------|------------------------------|
| 1 - Not at all | 5 - To a fairly large extent |
| 2 - To a very little extent | 6 - To a great extent |
| 3 - To a little extent | 7 - To a very great extent |
| 4 - To a moderate extent | |

- 38. To what extent are your job performance goals realistic?
- 39. To what extent do you perform the same tasks repeatedly within a short period of time?
- 40. To what extent are you faced with the same type of problem on a weekly basis?
- 41. To what extent are you aware of promotion/advancement opportunities that affect you?
- 42. To what extent do co-workers in your work group maintain high standards of performance?
- 43. To what extent do you have the opportunity to progress up your career ladder?
- 44. To what extent are you being prepared to accept increased responsibility?
- 45. To what extent do people who perform well receive recognition?
- 46. To what extent does your work give you a feeling of pride?
- 47. To what extent do you have the opportunity to learn skills which will improve your promotion potential?
- 48. To what extent do you have the necessary supplies to accomplish your job?
- 49. To what extent do details (tasks not covered by primary or additional duty descriptions) interfere with the performance of your primary job?
- 50. To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?

JOB DESIRES

The statements below deal with job related characteristics. Read each statement and choose the response which best represents how much you would like to have each characteristic in your job.

In my job, I would like to have the characteristics described:

- | | |
|---------------------------|-------------------------------|
| 1 - Not at all | 5 - A large amount |
| 2 - A slight amount | 6 - A very large amount |
| 3 - A moderate amount | 7 - An extremely large amount |
| 4 - A fairly large amount | |

- 51. Opportunities to have independence in my work.
- 52. A job that is meaningful.
- 53. An opportunity for personal growth in my job.
- 54. Opportunities in my work to use my skills.
- 55. Opportunities to perform a variety of tasks.
- 56. A job in which tasks are repetitive.
- 57. A job in which tasks are relatively easy to accomplish.

SUPERVISION

The statements below describe characteristics of managers or supervisors. Indicate your agreement by choosing the phrase which best represents your attitude concerning your supervisor.

- | | |
|--------------------------------|----------------------|
| 1 - Strongly disagree | 5 - Slightly agree |
| 2 - Moderately disagree | 6 - Moderately agree |
| 3 - Slightly disagree | 7 - Strongly agree |
| 4 - Neither agree nor disagree | |

Select the corresponding number for each statement and enter it on the separate response sheet.

- 58. My supervisor is a good planner.
- 59. My supervisor sets high performance standards.
- 60. My supervisor encourages teamwork.

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1 - Not at all
2 - A slight amount
3 - A moderate amount
4 - A fairly large amount

5 - A large amount
6 - A very large amount
7 - An extremely large amount

61. My supervisor represents the group at all times.
62. My supervisor establishes good work procedures.
63. My supervisor has made his responsibilities clear to the group.
64. My supervisor fully explains procedures to each group member.
65. My supervisor performs well under pressure.
66. My supervisor takes time to help me when needed.
67. My supervisor asks members for their ideas on task improvements.
68. My supervisor explains how my job contributes to the overall mission.
69. My supervisor helps me set specific goals.
70. My supervisor lets me know when I am doing a good job.
71. My supervisor lets me know when I am doing a poor job.
72. My supervisor always helps me improve my performance.
73. My supervisor insures that I get job related training when needed.
74. My job performance has improved due to feedback received from my supervisor.
75. When I need technical advice, I usually go to my supervisor.
76. My supervisor frequently gives me feedback on how well I am doing my job.

WORK GROUP PRODUCTIVITY

The statements below deal with the output of your work group. The term "your work group" refers to you and your co-workers who work for the same supervisor. Indicate your agreement with the statement by selecting the phrase which best expresses your opinion.

- | | |
|-------------------------|--------------------------------|
| 1 - Strongly disagree | 4 - Neither agree nor disagree |
| 2 - Moderately disagree | 5 - Slightly agree |
| 3 - Slightly disagree | 6 - Moderately agree |
| | 7 - Strongly agree |

Select the corresponding number for each statement and enter it on the separate response sheet.

77. The quantity of output of your work group is very high.
78. The quality of output of your work group is very high.
79. When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.
80. Your work group always gets maximum output from available resources (e.g., personnel and material).
81. Your work group's performance in comparison to similar work groups is very high.

ORGANIZATION CLIMATE

Below are items which describe characteristics of your organization. The term "your organization" refers to your squadron or staff agency. Indicate your agreement by choosing the phrase which best represents your opinion concerning your organization.

- | | |
|--------------------------------|----------------------|
| 1 - Strongly disagree | 5 - Slightly agree |
| 2 - Moderately disagree | 6 - Moderately agree |
| 3 - Slightly disagree | 7 - Strongly agree |
| 4 - Neither agree nor disagree | |

Select the corresponding number for each item and enter it on the separate response sheet.

82. Ideas developed by my work group are readily accepted by management personnel above my supervisor.

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83. My organization provides all the necessary information for me to do my job effectively.
84. My organization provides adequate information to my work group.
85. My work group is usually aware of important events and situations.
86. My complaints are aired satisfactorily.
87. My organization is very interested in the attitudes of the group members toward their jobs.
88. My organization has a very strong interest in the welfare of its people.
89. I am very proud to work for this organization.
90. I feel responsible to my organization in accomplishing its mission.
91. The information in my organization is widely shared so that those needing it have it available.
92. Personnel in my unit are recognized for outstanding performance.
93. I am usually given the opportunity to show or demonstrate my work to others.
94. There is a high spirit of teamwork among my co-workers.
95. There is outstanding cooperation between work groups of my organization.
96. My organization has clear-cut goals.
97. I feel motivated to contribute my best efforts to the mission of my organization.
98. My organization rewards individuals based on performance.
99. The goals of my organization are reasonable.
100. My organization provides accurate information to my work group.

JOB RELATED ISSUES

The items below are used to determine how satisfied you are with specific job related issues. Indicate your degree of satisfaction or dissatisfaction with each issue by choosing the most appropriate phrase.

- | | |
|--|--------------------------|
| 1 - Extremely dissatisfied | 5 - Slightly satisfied |
| 2 - Moderately dissatisfied | 6 - Moderately satisfied |
| 3 - Slightly dissatisfied | 7 - Extremely satisfied |
| 4 - Neither satisfied nor dissatisfied | |

Select the corresponding number for each question and enter it on the separate response sheet.

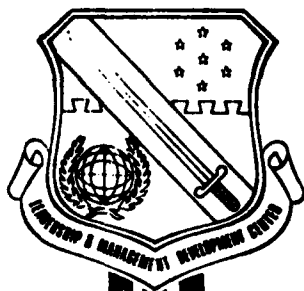
101. Feeling of Helpfulness
The chance to help people and improve their welfare through the performance of my job. The importance of my job performance to the welfare of others.
102. Co-Worker Relationship
My amount of effort compared to the effort of my co-workers, the extent to which my co-workers share the load, and the spirit of teamwork which exists among my co-workers.
103. Family Attitude Toward Job
The recognition and the pride my family has in the work I do.
104. On-the-Job Training (OJT)
The OJT instructional methods and instructors' competence.
105. Technical Training (Other than OJT)
The technical training I have received to perform my current job.
106. Work Schedule
My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.
107. Job Security
108. Acquired Valuable Skills
The chance to acquire valuable skills in my job which prepare me for future opportunities.
109. My Job as a Whole

APPENDIX

APPENDIX D

ORGANIZATIONAL ASSESSMENT PACKAGE SURVEY:

FACTORS AND VARIABLES



ORGANIZATIONAL ASSESSMENT PACKAGE SURVEY

FACTORS AND VARIABLES

JANUARY 1986

**LEADERSHIP AND MANAGEMENT DEVELOPMENT CENTER
AIR UNIVERSITY
Maxwell Air Force Base, Alabama 36112-5712**

FACTORS AND VARIABLES OF THE ORGANIZATIONAL ASSESSMENT PACKAGE

The OAP is a 109-item survey questionnaire designed jointly by the Air Force Human Resources Laboratory and the Leadership and Management Development Center (LMDC) and is used to aid LMDC in its missions to: (a) conduct research on Air Force systemic issues using information in the OAP database, (b) provide leadership and management training, and (c) provide management consultation service to Air Force commanders upon request.

Allowable responses to the attitudinal items on the survey range from 1 (low) to 7 (high). The attitudinal items are grouped into 25 factors that address such areas as the job itself, management and supervision, communications, and performance in the organization. Each data record consists of 7 externally coded descriptors and 24 demographic items as well as the responses to the 93 attitudinal items.

The factors measured by the OAP are grouped into a systems model to assess three aspects of a work group: input, process, and output (adapted from McGrath's model).

Input. In LMDC's adaptation of the model, input is comprised of demographics, work itself, and job enrichment.

A. Demographics. Descriptive or background information about the respondents to the OAP survey.

B. Work Itself. The work itself has to do with the task properties (technologies) and environmental conditions of the job. It assesses the patterns of characteristics members bring to the group or organization, and patterns of differentiation and integration among position and roles. The following OAP factors measure the work itself:

- 806 - Job Desires (Need For Enrichment)
- 810 - Job Performance Goals
- 812 - Task Characteristics
- 813 - Task Autonomy
- 814 - Work Repetition
- 816 - Desired Repetitive Easy Tasks
- 823 - Job Related Training

Job Influences (not a statistical factor)

C. Job Enrichment. Measures the degree to which the job itself is interesting, meaningful, challenging, and responsible. The following OAP factors measure job enrichment:

- 800 - Skill Variety
- 801 - Task Identity
- 802 - Task Significance
- 804 - Job Feedback
- 806 - Need for Enrichment Index (Job Desires)
- 807 - Job Motivation Index

- 808 - QJI Total Score
- 809 - Job Motivation Index - Additive
- 825 - Motivation Potential Score

Work Group Process. The work group assesses the pattern of activity and interaction among the group members. The following OAP factors measure leadership and the work group process:

- 805 - Performance Barriers/Blockages (Work Support)
- 818 - Management and Supervision
- 819 - Supervisory Communications Climate
- 820 - Organizational Communications Climate
- Work Interferences (not a statistical factor)
- Supervisory Assistance (not a statistical factor)

Work Group Output. Measures task performance, group development, and effects on group members. Assesses the quantity and quality of task performance and alteration of the group's relation to the environment. Assesses changes in positions and role patterns, and in the development of norms. Assesses changes on skills and attitudes, and effects on adjustment. The following OAP factors measure the work group output:

- 811 - Pride
- 817 - Advancement/Recognition
- 821 - Work Group Effectiveness (Perceived Productivity)
- 822 - Job Related Satisfaction
- 824 - General Organizational Climate

EXTERNALLY CODED DESCRIPTORS

Batch Number
Julian Date of Survey
Major Command
Base Code
Consultation Method
Consultant Code
Survey Version

(Note: These items are concatenated to each data record during EDP processing.)

DEMOGRAPHIC ITEMS (NOT A STATISTICAL FACTOR)

Variable Number	Statement Number	Statement	Variable Number	Statement Number	Statement
-	-	Supervisor's Code	004	2	Total months in present career field:
-	-	Work Group Code			1. Less than 1 month
-	-	Sex			2. More than 1 month, less than 6 months
-	-	Your age is			3. More than 6 months, less than 12 months
-	-	You are (officer, enlisted, GS, etc.)			4. More than 12 months, less than 18 months
-	-	Your pay grade is	005	3	5. More than 18 months, less than 24 months
-	-	Primary AFSC			6. More than 24 months, less than 36 months
-	-	Duty AFSC			7. More than 36 months
(Note: The above items are on the response sheet.)			006	4	Total months at this station:
001	-	(Not used)			1. Less than 1 month
002	-	(Not used)			2. More than 1 month, less than 6 months
003	1	Total years in the Air Force:			3. More than 6 months, less than 12 months
		1. Less than 1 year			4. More than 12 months, less than 18 months
		2. More than 1 year, less than 2 years			5. More than 18 months, less than 24 months
		3. More than 2 years, less than 3 years			6. More than 24 months, less than 36 months
		4. More than 3 years, less than 4 years			7. More than 36 months
		5. More than 4 years, less than 5 years			
		6. More than 5 years, less than 6 years			
			007	5	Your Ethnic Group is:
					1. American Indian or Alaskan Native
					2. Asian or Pacific Islander
					3. Black, not of Hispanic Origin
					4. Hispanic
					5. White, not of Hispanic Origin
					6. Other
			008	11	Which of the following "best" describes your marital status?
					0. Not married.
					1. Married: Spouse is a civilian employed outside home.
					2. Married: Spouse is a civilian employed outside home - geographically separated.
					3. Married: Spouse not employed outside home.
					4. Married: Spouse not employed outside home - geographically separated.
					5. Married: Spouse is a military member.
					6. Married: Spouse is a military member - geographically separated.
					7. Single parent.

Variable Number	Statement Number	Statement
009	6	<p>Your highest education level obtained is:</p> <ol style="list-style-type: none"> 1. Non-high school graduate 2. High school graduate or GED 3. Less than two years college 4. Two years or more college 5. Bachelors Degree 6. Masters Degree 7. Doctoral Degree
010	7	<p>Highest level of professional military education (residence or correspondence):</p> <ol style="list-style-type: none"> 0. None or not applicable 1. MCD Orientation Course or USAF Supervisor Course (MCD Phase 1 or 2) 2. MCD Leadership School (MCD Phase 3) 3. MCD Academy (MCD Phase 4) 4. Senior MCD Academy (MCD Phase 5) 5. Squadron Officer School 6. Intermediate Service School (i.e., ACSC, AFSC) 7. Senior Service School (i.e., AUC, ICAF, MAC)
011	8	<p>How many people do you directly supervise?</p> <ol style="list-style-type: none"> 1. None 2. 1 3. 2 4. 3 5. 4 to 5 6. 6 to 8 7. 9 or more
012	9	<p>For how many people do you write performance reports?</p> <ol style="list-style-type: none"> 1. None 2. 1 3. 2 4. 3 5. 4 to 5 6. 6 to 8 7. 9 or more
013	10	<p>Does your supervisor actually write your performance report?</p> <ol style="list-style-type: none"> 1. Yes 2. No 3. Not sure
014	11	<p>Your work requires you to work primarily:</p> <ol style="list-style-type: none"> 1. Alone 2. With one or two people 3. As a small work group (3-5 people) 4. As a large work group (6 or more people) 5. Other
015	12	<p>What is your usual work schedule?</p> <ol style="list-style-type: none"> 1. Day shift, normally stable hours 2. Swing shift (about 1600-2400) 3. Mid shift (about 2400-0800) 4. Rotating shift schedule 5. Day or shift work with irregular/unstable hours 6. Frequent TDY/travel or frequently on-call to report to work 7. Crew schedule
016	13	<p>How often does your supervisor hold group meetings?</p> <ol style="list-style-type: none"> 1. Never 2. Occasionally 3. Monthly 4. Weekly 5. Daily 6. Continuously
017	14	<p>How often are group meetings used to solve problems and establish goals?</p> <ol style="list-style-type: none"> 1. Never 2. Occasionally 3. About half the time 4. All of the time
018	15	<p>What is your aeronautical rating and current status?</p> <ol style="list-style-type: none"> 1. Nonrated, not on aircrew 2. Nonrated, new on aircrew 3. Rated, in crew/operations job 4. Rated, in support job

Appendix D

Variable
Number

019

Statement
Number

16

Which of the following best describes your career or employment intentions?

1. Planning to retire in the next 12 months
2. Will continue in/with the Air Force as a career
3. Will most likely continue in/with the Air Force
4. May continue in/with the Air Force
5. Will most likely not make the Air Force a career
6. Will separate/terminate from the Air Force as soon as possible

NOTE: Variable 006, Statement 11 was added to the QAP on 19 Jan 80 and replaced variable 014 which appears on page 6. Although no longer used, Variable 014 is still shown because data collected from about 25,000 samples for this variable are still in the data base.

FACTORS

Each 800 series factor consists of two or more variables which correspond to statements in the QAP. A mean score can be derived for each factor except 805, 807, 808, 809 and 825 by using a "straight average." The formula for computing the exceptions is indicated.

FACTOR 800 - SKILL VARIETY: Measures the degree to which a job requires a variety of different tasks or activities in carrying out the work; involves the use of a number of different skills and talents of the worker; skills required are valued by the worker.

Variable Number	Statement Number	Statement
201	17	To what extent does your job require you to do many different things, using a variety of your talents and skills?
212	29	To what extent does your job require you to use a number of complex skills?

FACTOR 801 - TASK IDENTITY: Measures the degree to which the job requires completion of a "whole" and identifiable piece of work from beginning to end.

Variable Number	Statement Number	Statement
202	18	To what extent does your job involve doing a whole task or unit of work?
211	28	To what extent does your job provide you with a chance to finish completely the piece of work you have begun?

FACTOR 802 - TASK SIGNIFICANCE: Measures the degree to which the job has a substantial impact on the lives or work of others; the importance of the job.

Variable Number	Statement Number	Statement
203	19	To what extent is your job significant in that it affects others in some important way?
210	27	To what extent does doing your job well affect a lot of people?

FACTOR 803 (NOT USED)

FACTOR 804 - JOB FEEDBACK: Measures the degree to which carrying out the work activities required by the job results in the worker obtaining clear and direct information about job outcomes or information on good and poor performance.

Variable Number	Statement Number	Statement
272	22	To what extent are you able to determine how well you are doing your job without feedback from anyone else?
209	26	To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?

FACTOR 805 - WORK SUPPORT: Measures the degree to which work performance is hindered by additional duties, details, inadequate tools, equipment, or work space.

Variable Number	Statement Number	Statement
206	23	To what extent do additional duties interfere with the performance of your primary job?
207	24	To what extent do you have adequate tools and equipment to accomplish your job?
208	25	To what extent is the amount of work space provided adequate?

Formula (8-206+207+208)/3

FACTOR 806 - NEED FOR ENRICHMENT INDEX (JOB DESIRES): Measures the degree to which the job has a substantial impact on the lives or work of others; the importance of the job.

Variable Number	Statement Number	Statement
249	51	Opportunities to have independence in my work.
250	52	A job that is meaningful.
251	53	The opportunity for personal growth in my job.
252	54	Opportunities in my work to use my skills.
253	55	Opportunities to perform a variety of tasks.

FACTOR 807 - JOB MOTIVATION INDEX: A composite index derived from the six job characteristics that comprise the "motivating potential" of a job; the degree to which a job will prompt high internal work motivation on the part of job incumbents.

Index is computed using the following factors:

800	Skill variety
801	Task identity
802	Task significance
803	Performance barriers/blockages
804	Task autonomy
804	Job feedback

Formula (800+801+802+803+804)/4

FACTOR 808 - GJI TOTAL SCORE: Assesses one's perception of motivation provided by his or her job. This factor is a variation of a scale employed by other job motivation theorists.

Score is computed using the variables in the following formula:

Formula (7201+7202+7203+7270+7271+7272+7273+7274+7275+7276+7277+7278+7279+7280+7281+7282+7283+7284+7285+7286+7287+7288+7289+7290+7291+7292+7293+7294+7295+7296+7297+7298+7299+7300+7301+7302+7303+7304+7305+7306+7307+7308+7309+7310+7311+7312+7313)

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FACTOR 809 - JOB MOTIVATION INDEX ---- ADDITIVE: This factor is a variation of a scale employed by other job motivation theorists.

Index is computed using the following factors:

- 800 Skill variety
- 801 Task identity
- 802 Task significance
- 803 Performance barriers/blockages
- 804 Task autonomy
- 805 Work repetition

Formula ((800+801+802+803)/4) + 813-804

FACTOR 810 - JOB PERFORMANCE GOALS: Measures the extent to which job performance goals are clear, specific, realistic, understandable, and challenging.

Variable Number	Statement Number	Statement
217	34	To what extent do you know exactly what is expected of you in performing your job?
218	35	To what extent are your job performance goals difficult to accomplish?
219	36	To what extent are your job performance goals clear?
220	37	To what extent are your job performance goals specific?
221	38	To what extent are your job performance goals realistic?

FACTOR 811 - PRIDE: Measures the pride in one's work.

Variable Number	Statement Number	Statement
215	39	To what extent are you proud of your job?
216	40	To what extent does your work give you a feeling of pride?

11

FACTOR 812 - TASK CHARACTERISTICS: A combination of skill variety, task identity, task significance, and job feedback designed to measure several aspects of one's job.

Variable Number	Statement Number	Statement
201	17	To what extent does your job require you to do many different things, using a variety of your talents and skills?
202	18	To what extent does your job involve doing a whole task or unit of work?
203	19	To what extent is your job significant, in that it affects others in some important way?
204	20	To what extent are you able to determine how well you are doing your job without feedback from anyone else?
205	21	To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?
206	22	To what extent does doing your job well affect a lot of people?
207	23	To what extent does your job provide you with a chance to finish completely the piece of work you have begun?
208	24	To what extent does your job require you to use a number of complex skills?

FACTOR 813 - TASK AUTONOMY: Measures the degree to which the job provides freedom to do the work as one sees fit; discretion in scheduling, decision making, and means for accomplishing a job.

Variable Number	Statement Number	Statement
210	25	To what extent does your job provide a great deal of freedom and independence in scheduling your work?
211	26	To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?
212	27	To what extent does your job give you freedom to do your work as you see fit?
213	28	To what extent are you allowed to make the major decisions required to perform your job well?

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FACTOR 814 - WORK REPETITION: Measures the extent to which one performs the same tasks or faces the same type of problems in his or her job on a regular basis.

Variable Number	Statement Number	Statement
226	39	To what extent do you perform the same tasks repeatedly within a short period of time?
227	40	To what extent are you faced with the same type of problem on a weekly basis?

FACTOR 815 (NOT USED)

FACTOR 816 - DESIRED REPETITIVE EASY TASKS: Measures the extent to which one desires his or her job involve repetitive tasks or tasks that are easy to accomplish.

Variable Number	Statement Number	Statement
255	56	A job in which tasks are repetitive.
258	57	A job in which tasks are relatively easy to accomplish.

FACTOR - JOB INFLUENCES (NOT A STATISTICAL FACTOR):

Variable Number	Statement Number	Statement
216	33	To what extent do you feel accountable to your supervisor in accomplishing your job?
238	42	To what extent do co-workers in your work group maintain high standards of performance?

FACTOR 817 - ADVANCEMENT/RECOGNITION: Measures one's awareness of advancement and recognition, and feelings of being prepared (i.e., learning new skills for promotion).

Variable Number	Statement Number	Statement
234	41	To what extent are you aware of promotion/advancement opportunities that affect you?
239	43	To what extent do you have the opportunity to progress up your career ladder?

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240	44	To what extent are you being prepared to accept increased responsibility?
241	45	To what extent do people who perform well receive recognition?
276	47	To what extent do you have the opportunity to learn skills which will improve your promotion potential?

FACTOR 818 - MANAGEMENT AND SUPERVISION (A): Measures the degree to which the worker has high performance standards and good work procedures. Measures support and guidance received, and the overall quality of supervision.

Variable Number	Statement Number	Statement
404	58	My supervisor is a good planner.
405	59	My supervisor sets high performance standards.
410	60	My supervisor encourages teamwork.
411	61	My supervisor represents the group at all times.
412	62	My supervisor establishes good work procedures.
413	63	My supervisor has made his responsibilities clear to the group.
445	64	My supervisor fully explains procedures to each group member.
416	65	My supervisor performs well under pressure.

FACTOR - MANAGEMENT AND SUPERVISION (B): (NOT A STATISTICAL FACTOR)

Variable Number	Statement Number	Statement
424	66	My supervisor takes time to help me when needed.
434	71	My supervisor lets me know when I am doing a poor job.
439	75	When I need technical advice, I usually go to my supervisor.

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Appendix D

FACTOR 819 - SUPERVISORY COMMUNICATIONS CLIMATE: Measures the degree to which the worker perceives that there is good rapport with supervisors, that there is a good working environment, that innovation for task improvement is encouraged, and that rewards are based upon performance.

Variable Number	Statement Number	Statement
426	67	My supervisor asks members for their ideas on task improvements.
428	68	My supervisor explains how my job contributes to the overall mission.
431	69	My supervisor helps me set specific goals.
433	70	My supervisor lets me know when I am doing a good job.
435	72	My supervisor always helps me improve my performance.
436	73	My supervisor insures that I get job related training when needed.
437	74	My job performance has improved due to feedback received from my supervisor.
442	76	My supervisor frequently gives me feedback on how well I am doing my job.

FACTOR 820 - ORGANIZATIONAL COMMUNICATIONS CLIMATE: Measures the degree to which the worker perceives that there is an open communications environment in the organization, and that adequate information is provided to accomplish the job.

Variable Number	Statement Number	Statement
300	82	Ideas developed by my work group are readily accepted by management personnel above my supervisor.
301	83	My organization provides all the necessary information for me to do my job effectively.
302	84	My organization provides adequate information to my work group.
303	85	My work group is usually aware of important events and situations.
304	86	My complaints are aired satisfactorily.
309	91	The information in my organization is widely shared so that those needing it have it available.

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314	96	My organization has clear-cut goals.
317	99	The goals of my organization are reasonable.
318	100	My organization provides accurate information to my work group.

FACTOR 821 - WORK GROUP EFFECTIVENESS: Measures one's view of the quantity, quality, and efficiency of work generated by his or her work group.

Variable Number	Statement Number	Statement
259	77	The quantity of output of your work group is very high.
260	78	The quality of output of your work group is very high.
261	79	When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.
264	80	Your work group always gets maximum output from available resources (e.g., personnel and material).
265	81	Your work group's performance in comparison to similar work groups is very high.

FACTOR - WORK INTERFERENCES (NOT A STATISTICAL FACTOR): Identifies things that impede an individual's job performance.

Variable Number	Statement Number	Statement
277	48	To what extent do you have the necessary supplies to accomplish your job?
278	49	To what extent do details (task not covered by primary or additional duty descriptions) interfere with the performance of your primary job?
279	50	To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?

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FACTOR 822 - JOB RELATED SATISFACTION: Measures the degree to which the worker is generally satisfied with factors surrounding the job.

Variable Number	Statement Number	Statement
705	101	Feeling of helplessness The chance to help people and improve their welfare through the performance of my job. The importance of my job performance to the welfare of others.
709	102	Co-worker Relationships My amount of effort compared to the effort of my co-workers, the extent to which my co-workers share the load, and the spirit of teamwork which exists among my co-workers.
710	103	Family Attitude Toward Job The recognition and the pride my family has in the work I do.
717	106	Work Schedule My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.
718	107	Job Security
719	108	Acquired Valuable Skills The chance to acquire valuable skills in my job which prepare me for future opportunities
723	109	My Job as a Whole

FACTOR 823 - JOB RELATED TRAINING: Measures the extent to which one is satisfied with on-the-job and technical training received.

Variable Number	Statement Number	Statement
711	104	On-the-Job Training (OJT) The OJT instructional methods and instructors' competence.
712	105	Technical Training (Other than OJT) The technical training I have received to perform my current job.

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FACTOR 824 - GENERAL ORGANIZATIONAL CLIMATE: Measures the individual's perception of his or her organizational environment as a whole (i.e. spirit of teamwork, communications, organizational pride, etc.).

Variable Number	Statement Number	Statement
305	87	My organization is very interested in the attitudes of the group members toward their jobs.
306	88	My organization has a very strong interest in the welfare of its people.
307	89	I am very proud to work for this organization.
308	90	I feel responsible to my organization in accomplishing its mission.
310	92	Personnel in my unit are recognized for outstanding performance.
311	93	I am usually given the opportunity to show or demonstrate my work to others.
312	94	There is a high spirit of teamwork among my co-workers.
313	95	There is outstanding cooperation between work groups of my organization.
315	97	I feel motivated to contribute my best efforts to the mission of my organization.
316	98	My organization rewards individuals based on performance.

FACTOR 825 - MOTIVATION POTENTIAL SCORE: This factor is another variation of a scale employed by other job motivation theorists. The score ranges between 1 and 343 with 109 being the Air Force average. Low scores indicate a poorly motivating job. Score is computed using the following factors:

800	Skill variety
801	Task identity
802	Task significance
804	Job feedback
813	Task autonomy

Formula: $(800+801+802/3)*813+804$

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Appendix D

VARIABLES

Variable
Number

Factor

Statement
Number

201 800/812 17

To what extent does your job require you to do many different things, using a variety of your talents and skills?

202 801/812 18

To what extent does your job involve doing a whole task or unit of work?

203 802/812 19

To what extent is your job significant, in that it affects others in some important way?

204 & 205 -- --

(Not used)

206 805 23

To what extent do additional duties interfere with the performance of your primary job?

207 805 24

To what extent do you have adequate tools and equipment to accomplish your job?

208 805 25

To what extent is the amount of work space provided adequate?

209 804/812 26

To what extent does your job provide the chance to know for yourself when you do a good job, and to be responsible for your own work?

210 802/812 27

To what extent does doing your job well affect a lot of people?

211 801/812 28

To what extent does your job provide you with a chance to finish completely the piece of work you have begun?

212 800/812 29

To what extent does your job require you to use a number of complex skills?

Variable
Number

Factor

Statement
Number

213

813

30

To what extent does your job give you freedom to do your work as you see fit?

214

813

31

To what extent are you allowed to make the major decisions required to perform your job well?

215

811

32

To what extent are you proud of your job?

216*

--

33

To what extent do you feel accountable to your supervisor in accomplishing your job?

217

810

34

To what extent do you know exactly what is expected of you in performing your job?

218

810

35

To what extent are your job performance goals difficult to accomplish?

219 & 220

--

--

(Not used)

221

810

36

To what extent are your job performance goals realistic?

222-225

--

--

(Not used)

226

814

39

To what extent do you perform the same tasks repeatedly within a short period of time?

227

814

40

To what extent are you faced with the same type of problem on a weekly basis?

* This variable is an element of "job influences" (not a statistical factor).

Variable Number	Factor	Statement Number
228-233	--	--
234	817	41
235-237	--	--
238*	--	42
239	817	43
240	817	44
241	817	45
242-248	--	--
249	806	51
250	806	52
251	806	53
252	806	54
253	806	55
254	--	--
255	816	56

(Not used)

To what extent are you aware of promotion/advancement opportunities that affect you?

(Not used)

To what extent do co-workers in your work group maintain high standards of performance?

To what extent do you have the opportunity to progress up your career ladder?

To what extent are you being prepared to accept increased responsibility?

To what extent do people who perform well receive recognition?

(Not used)

Opportunities to have independence in my work?

A job that is meaningful.

The opportunity for personal growth in my job.

Opportunities in my work to use my skills.

Opportunities to perform a variety of tasks.

(Not used)

A job in which tasks are repetitive.

* This variable is an element of "job influences" (not a statistical factor).

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Variable Number	Factor	Statement Number
256 & 257	--	--
258	816	57
259	821	77
260	821	76
261	821	79
262 & 263	--	--
264	821	80
265	821	81
266-269	--	--
270	813	20
271	813	21
272	804/812	22

(Not used)

A job in which tasks are relatively easy to accomplish.

The quantity of output of your work group is very high.

The quality of output of your work group is very high.

When high priority work arises, such as short suspenses, crash programs, and schedule changes, the people in my work group do an outstanding job in handling these situations.

(Not used)

Your work group always gets maximum output from available resources (e.g., personnel and material).

Your work group's performance in comparison to similar work groups is very high.

(Not used)

To what extent does your job provide a great deal of freedom and independence in scheduling your work?

To what extent does your job provide a great deal of freedom and independence in selecting your own procedures to accomplish it?

To what extent are you able to determine how well you are doing your job without feedback from anyone else?

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AD-A166 723

A COMPARISON OF JOB ATTITUDES: AIR TRAINING COMMAND
PERSONNEL VERSUS OTHER AIR FORCE PERSONNEL(U) AIR
COMMAND AND STAFF COLL MAXWELL AFB AL L N CHAYER

2/2

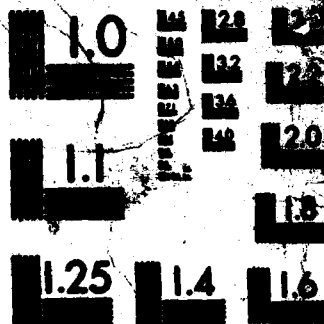
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Appendix D

Variable Number	Factor	Statement	Variable Number	Factor	Statement
273	810	36	303	820	85
		To what extent are your job performance goals clear?			My work group is usually aware of important events and situations.
274	810	37	304	820	86
		To what extent are your job performance goals specific?			My complaints are aired satisfactorily.
275	811	46	305	824	87
		To what extent does your work give you a feeling of pride?			My organization is very interested in the attitudes of the group members toward their jobs.
276	817	47	306	824	88
		To what extent do you have the opportunity to learn skills which will improve your promotion potential?			My organization has a very strong interest in the welfare of its people.
277**	--	49	307	824	89
		To what extent do you have the necessary supplies to accomplish your job?			I am very proud to work for this organization.
278**	--	49	308	824	90
		To what extent do details (task not covered by primary or additional duty descriptions) interfere with the performance of your primary job?			I feel responsible to my organization in accomplishing its mission.
279**	--	50	309	820	91
		To what extent does a bottleneck in your organization seriously affect the flow of work either to or from your group?			The information in my organization is widely shared so that those needing it have it available.
280-299	--	--	310	824	92
		(Not used)			Personnel in my unit are recognized for outstanding performance.
300	820	82	311	824	93
		Ideas developed by my work group are readily accepted by management personnel above my supervisor.			I am usually given the opportunity to show or demonstrate my work to others.
301	820	83	312	824	94
		My organization provides all the necessary information for me to do my job effectively.			There is a high spirit of teamwork among my co-workers.
302	820	84	313	824	95
		My organization provides adequate information to my work group.			There is outstanding cooperation between work groups of my organization.

** These variables are elements of "work interferences" (not a statistical factor).

Variable Number	Factor	Statement
314	820	96
315	824	97
316	824	98
317	820	99
318	820	100
319-403	--	--
404	818	98
405	818	99
406-409	--	--
410	818	60
411	818	61
412	818	62
413	818	63
414 & 415	--	--
416	818	65
417-423	--	--
424---	--	66
425	--	--

--- This variable is an element of "supervisory assistance" (not a statistical factor).

25

Variable Number	Factor	Statement Number
426	819	67
427	--	--
428	819	68
429 & 430	--	--
431	819	69
432	--	--
433	819	70
434---	--	71
435	819	72
436	819	73
437	819	74
438	--	--
439---	--	75
440 & 441	--	--
442	819	76
443 & 444	--	--
445	818	64
446-704	--	--

--- These variables are elements of "supervisory assistance" (not a statistical factor).

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Appendix D

Variable Number	Factor	Statement Number
705	822	101
706-708	--	--
709	822	102
710	822	103
711	823	104
712	823	105
713-716	--	--
717	822	106
718	822	107
719	822	108
720-722	--	--
723	822	109
724-999	--	--

Statement

Feeling of Helplessness
The chance to help people and improve their welfare through the performance of my job. The importance of my job performance to the welfare of others.

(Not used)

Co-worker Relationships

My amount of effort compared to the effort of my co-workers. The extent to which my co-workers share the load, and the spirit of teamwork which exists among my co-workers.

Family Attitude Toward Job

The recognition and the pride my family has in the work I do.

On-the-Job Training (OJT)

The OJT instructional methods and instructors' competence.

Technical Training (Other than OJT)

The technical training I have received to perform my current job.

(Not used)

Work Schedule

My work schedule; flexibility and regularity of my work schedule; the number of hours I work per week.

Job SecurityAcquired Valuable Skills

The chance to acquire valuable skills in my job which prepare me for future opportunities.

(Not used)

My Job as a Whole

(Not used)

END
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